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ABSTRACT

The three-year San Antonio Experience-Based Career Education (EBCE) Project, an implementation of the Northwest Regional Educational Laboratory EBCE model, was evaluated for its first year of operation. The project was designed to assist youth in making a successful transition to adulthood through community-based and learning center experiences, and was implemented by the Harlandale Independent School District and the San Antonio Independent School District. Learning resources consisted of those in the learning center and those provided at community sites. Twenty program and twenty control students were selected in both school districts. The project evaluation covered two components: process and outcome. The process focused on program elements deemed essential for a valid demonstration of the EBCE model. The outcome evaluation was designed to test a set of hypotheses related to student development in career, life, and basic skills and utilized a battery of four tests for pre- and posttest measures. Results showed that both school districts were successful in planning and implementing the project. Outcome evaluation demonstrated very strong comparative effects in attitude toward school, self-acceptance, and others acceptance. Life skills were positively affected by participation in the program. Career skills results showed no consistent patterns of difference between the program and control students. (This report includes three major sections: annual interim report, third-party evaluation, and appended project materials.) (SH)

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ANNUAL FINAL REPORT

Project No. 502-AH-60020
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SAN ANTONIO EXPERIENCE BASED CAREER EDUCATION DEMONSTRATION PROJECT

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

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Bill R. Lafferty
Education Service Center, Region 20
1550 N.E. Loop 410
San Antonio, Texas 78209

October 30, 1977

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ANNUAL INTERIM REPORT

Summary

The San Antonio Experienced Based Career Education (EBCE) Demonstration Project is an implementation of the Northwest Regional Educational Laboratory EBCE model. This model is one of four developed under the sponsorship of the U. S. Office of Education and the National Institute of Education. The San Antonio Demonstration Project is a three year project funded through the U.S. Office of Education with Vocational Education Act monies for Exemplary Projects

a. *Time period covered by this report*

Implementation of the San Antonio Experienced Based Career Education Demonstration Project began initially on September 15, 1976, and continued through August 31, 1977. The first term of the San Antonio program began for students during the week of February 21, 1977, and concluded the week of May 23, 1977. The initial implementation was thus abbreviated in duration to one quarter of the total 1976-1977 academic year; two full program years are anticipated for 1977-1978 and 1978-1979.

b. *Goals and objectives of the project*

The major project objectives for the first year were:

- Install and ready for operation the Northwest Regional Educational Laboratory EBCE model in two discrete independent school districts geographically situated in the City of San Antonio.

- Operate the program for one quarter providing a maximum of forty students with EBCE benefits as specified in Part IV, Part D, Project Approach, of the San Antonio EBCE Demonstration Project Proposal

- Establish ancillary relationships and operationalize a third party evaluation conducted by Research for Better Schools, Incorporated

- Plan details of dissemination/demonstration plan.

c. *Results: Accomplishments*

Project staff were selected through the usual procedures employed by the participating school districts. Each district selected a project manager, a student activities specialist and a learning manager. Staff members were trained in special sessions by personnel from the Northwest Regional Educational Laboratory. The selection and preparation procedures appeared to result in a staff adequate for implementing the program.

Learning resources consisted of those in the learning center and those provided at community sites. Each district established a learning center in one of the district's school buildings. One of these centers had inadequate space and the space requirement was improved during the summer. Both school districts began to acquire learning materials for the centers. Community sites were recruited in abundance, with 45 for

Harlandale Independent School District Learning Center and 41 for the San Antonio Independent School District Learning Center. Some needs have been noted in preparing the sites for work with students.

Students were selected in both school districts using a stratified random procedure for program and control groups. Many more students applied for the San Antonio Independent School District program than was true for the Harlandale Independent School District, but both districts were able to meet the need for 20 programs and 20 control students.

In both districts the project staff members shared responsibility for developing students' learning plans. The planning task was more centralized with the learning manager at the San Antonio Independent School District Learning Center, while each Harlandale Independent School District Learning Center staff member had charge of a group of students. All learning plans were carefully developed with knowledge and awareness of each student's needs and interests.

The implementation of learning activities proceeded successfully with all students completing the major project requirements:

4 Awareness Visits
2 Explorations
1 Learning Level Project
2 Life Skills Projects
5 Functional Competencies

Most requirements involved the use of community sites as well as learning center staff and resources. Given the brief time period available to plan and implement the program (January 3, 1977 - May 20, 1977), this activity completeness represents a substantial accomplishment.

Participant-perceived effects questionnaires were administered to all program students, their parents, and community site representatives. The results were strongly supportive of the program, indicating that the program is perceived very favorably by participants and considered to be a valuable addition to the educational system.

The avoidance of sex-role stereotyping was an important aspect in the program plan relevant to staff training, community site development, student placement, and personal counseling. An external advisory committee was planned in each district to review project activities as they related to the avoidance of sex-role stereotyping. These committees were composed but not operationalized. Developing these committees as active groups remains a priority for 1977-1978.

d. *Evaluation*

One component of the project is a third-party evaluation conducted by Research for Better Schools, Incorporated. A detailed "Evaluation Plan" 1 was prepared by Research for Better Schools to meet the U. S. Office of Education specifications.[2] This plan included a design for evaluating the program implementation process and the student outcomes associated with participation in the program.

The process evaluation focused on program elements deemed essential for a valid demonstration of the EBCE model. Standards of performance were established for each element based on the project proposal and the NWREL model description. Related data were gathered through structured observations, interviews, and reviews of project files on the part of the third-party evaluator's representative. The evaluator spent three weeks on site in February, April and June to collect the necessary information.

The outcome evaluation was designed to test a set of hypotheses related to student development in career, life and basic skills. A true experimental design was employed with pretest and posttest administrations of the instrument package. Testing was conducted in a standardized manner by the project staff under the direction of the evaluator. All analyses were completed at Research for Better Schools, Incorporated. Test result summaries, in the form of individual and group profiles for the pretest and posttest, were submitted to the Project Director and subsequently transmitted to the project staffs.

A process and outcome evaluation was thus conducted by Research for Better Schools, Incorporated utilizing staff trained and experienced in the evaluation of Experience Based Career Education. The effort included a senior evaluator, statistical clerk, programmers, and other staff resources.

e. *Conclusions and Recommendations*

Conclusions:

The Harlandale Independent School District and the San Antonio Independent School District Learning Center Staffs did a commendable job in planning and implementing the San Antonio Experienced Based Career Education Demonstration Project. Likewise, the careful attention to detail and central office administrative support tirelessly provided by Mr. Glenn Porter of the San Antonio Independent School District is especially noteworthy. The San Antonio program model requires the recruitment of a large number of community sites, the retraining of staff for new roles, the recruitment of students, the orientation of students, and the implementation of a complex program model. The model was implemented well. The learning and student activities staff members displayed a competence and a developing sophistication in the performance of their roles. Students met the specific activity requirements of the model. This first year represents an excellent initial implementation of EBCE.

The outcome evaluation demonstrated a very strong comparative effects in attitudes toward school, self acceptance, and others acceptance.

These important life skills were positively affected by participation in the program. The career skills results showed no consistent patterns of difference between the program and control students. This finding must be interpreted with cognizance that the program was of very limited duration and involved small numbers of students. The time for growth was constrained and the potential for significance lowered by the small samples. Next year will provide a better test of the outcome hypotheses.

The project when reviewed in terms of its proposed objectives and the relevant federal requirements is perceived to be in compliance with stated objectives and regulations, meeting both the letter and intent.

Recommendations:

A series of recommendations has been formulated to assist in refinement of the program for future years.

Period of Grant

Currently the period of grant is September 15, 1977 through September 14, 1978, both dates inclusive. School districts in Texas operate an academic year commencing on or about September 1 and extending through May 30. The period of grant and the operational year for school districts should be coterminous.

Develop Learning Center Resources

Experienced-based learning combines the best elements of academic classroom learning with the best of learning by doing. It broadens the base of the classroom to make the whole community the learning environment.

Although many of the career and academic skills needed by students can be supplied through community sites, substantial and accessible materials are needed in the learning centers to support vicarious exploration and to fulfill diagnosed needs. Both project learning centers have indicated some development, but a more concentrated effort is needed, especially as 11th grade students move into the program.

Liability Insurance

Insurance laws peculiar to the State of Texas do not encourage insurance underwriters to satisfy those requirements whereby certificates of insurance can be issued by carriers to provide the grantee with employer liability coverage on community site premises. Some exploration at both the state and national level is probably warranted here.

The grantor should hold in abeyance and/or wave the federal guideline requirements relating to employer liability coverage until appropriate insurance coverage becomes available on the Texas market.

Student medical and accidental death coverage is available and has been provided the San Antonio Experienced Based Career Education Demonstration Project by Aetna.

Activate Committees for the Avoidance of Sex-Role Stereotyping

These committees have been initiated, but no formal activities have been undertaken. This remains a project pirority.

Coordinate Use of Community Sites Serving Both School Districts

Several community sites have been recruited and utilized by both the Harlandale Independent School District and the San Antonio Independent School District. Since the school districts exist in close proximity, this is a natural occurrence. It does however, hold some problematic potentials. Procedures must be designed to avoid harmful potentials.

Develop Procedures for Preparing Community Site Personnel

Several operational problems involving the community sites have occurred. Also, it is apparent that differing views on the program goals and procedures are held. An orientation packet needs to be prepared to faciliate an understanding of the program in a written form. Verbal presentation to prospective participants should also be standardized so that consistent and complete information is given.

Review Site Analysis Procedures

The present site analysis forms are cumbersome and possibly not necessary in full form for all sites. The exact data needs for student program planning should be addressed.

Maintain Communication With Sites Which Are Recruited But Not Used

Both the Harlandale Independent School District and the San Antonio Independent School District list many sites as recruited, but unused by students.

This is a desirable condition for the program, but it raises a potential problem. Sites may be "put off" by having given a commitment which then is not exercised. Procedures to obviate this type of occurrence need to be developed.

Select More Alternates as Back-up for Student Control Groups

Dropouts from the San Antonio Independent School District project earlier this year resulted in the transfer of students from the control group. While this procedure has practial merit, it detracts from the evaluation effort.

Review Staff Roles

Discussions about staff roles with various staff members led to the conclusion that the two different school districts used different role definitions, and complete disregard of the definitions developed by the prime sponsor; concomitantly, some problems in complete coverage of responsibility or level of efficiency have been encountered. Staff role structuring in practice should be centrally coordinated and the benefits of the Northwest Regional Education Laboratory experience in this area needs to be applied.

Other

Several program aspects are duly noted as behind schedule due to the late notification of the grant award and commensurate with that, the late implementation of the project. This includes the external advisory committee, the dissemination plan, and implementation of the employer seminars. These minor problems will be corrected.

ANNUAL INTERIM REPORT

ACCOMPLISHMENTS

Program Identification

The San Antonio Experienced Based Career Education (EBCE) Demonstration Project is an implementation of the Northwest Regional Educational Laboratory EBCE model. This model is one of four developed under sponsorship of the U.S. Office of Education and the National Institute of Education. The San Antonio Demonstration Project is a three year project funded through the U.S. Office of Education with Vocational Education Act monies for Exemplary Projects.

Education Service Center, Region 20, in cooperation with the Harlandale Independent School District and the San Antonio Independent School District established a site to conduct the demonstration of one of the four Experienced-Based Career Education Programs (EBCE) developed under the auspices of the National Institute of Education. Based on a replication of the Northwest Regional Educational Laboratory (NWREL) EBCE model, the San Antonio EBCE Demonstration Project (1) has brought the benefits of experientially based career education to one of the most appropriate areas in South Texas, (2) is demonstrating and replicating the NWREL model for EBCE, and (3) is disseminating the results at both state and local levels. The project is also creating a lasting impression on educational practice in the educational community served by Region 20.

There is a national awareness that the educational system does not prepare students to become productive, self-sufficient, and self-fulfilled members of society because the educational system fails to utilize all relevant and available resources. Positive and self-satisfying career decisions require experiences as varied as the students themselves. Such experiences are available in many segments of society as is expertise to assist students in developing solutions.[1] No delivery system exists, however, for the utilization of these resources, only that assistance encouraged and supported by the pioneering efforts of select federal agencies. The school curriculum may provide certain basic education and certain vocational skills, but it tends to omit real world experiences, counseling and other career guidance services, important training in the free enterprise system, data on human rights in career areas, information on job trends and opportunities, and information on occupational requirements.

[1] Kenneth B. Hoyt. An Introduction to Career Education: A policy paper of the U.S. Office of Education. (Washington D.C., The U.S. Office of Education, 1974), pp. 4-5.

Texas is typical of the nation in most aspects of career education development. Career education is in its infancy, but a more acute awareness is evolving. Career education needs, for example, have recently been recognized by the State Board of Education. The Texas State Plan for Career Education, adopted by the State Board of Education, June 14, 1975, sets forth a board goal and need: "By 1980, career education will be an integral part of the education program in each school system in Texas." [2] Although career education had been placed in the top ten priorities of the Texas Education Agency (TEA) as early as May, 1973, state funding is not yet available. Fifty independent school districts and fourteen counties comprise the geographic area served by Education Service Center, Region 20. The student population of Region 20 is approximately 250,000. Fifteen of the fifty school districts are located within Bexar County; the combined school population of the fifteen Bexar County school districts is 208,000.

All of the Local Education Agencies (LEA's) need a career education program, but most of these LEA's lack the resources to plan or implement EBCE. By coordinating an exemplary EBCE program within two San Antonio city school districts with the highest unemployment

[2] State Plan for Career Education and Incremental Quality Improvement Guide for Local School Districts, prepared by Texas Education Agency, 1976.

and student dropout rates, ESC, Region 20, is gaining valuable community-career education program experience. This experience will not only be thoroughly distributed to other Regional Education Service Centers in Texas, but it will also be used as a basis for developing other EBCE programs among the LEA's within Region 20.

San Antonio has one of the highest persistent unemployment rates and the highest overall unemployment rate among the three largest cities in the state of Texas. According to the "Texas Employment Commission Summary of Labor Force Estimates", the March, 1976, unemployment rate average was 7.1%. This increased to 8.5% in June, 1976, as a result of school dismissal. In addition to the low socioeconomic status of San Antonio, there is an ethnic distribution problem within the city operating against better jobs for unskilled and undertrained workers. The school dropout rate within the area of Region 20 is also persistently high.

The Harlandale Independent School District concluded in November, 1975, a four year survey (1972-1975) of high school graduates. Data from this survey support the need for EBCE in San Antonio: an average of 30% of the graduates are now in college; another 15% have dropped out of college; of the graduates in the world of work, 5% voluntarily dropped out of the labor force; an additional 7% are unemployed.

Follow-up studies of available graduates of selected high schools provide useful data on the fate of the more successful students. Responses were not obtained from a majority of graduates, nor were answers obtained from non-graduates (dropouts). This omission is the result of the extreme difficulty in locating persons who have dropped out of the successful "mainstream." In spite of these limitations, these data do illustrate the need for improving the schools' ability to prepare students for productive careers.

Harlandale and San Antonio Independent School Districts were selected as appropriate demonstration sites for the EBCE exemplary program. These two school districts have a combined student population of 73,874. The 1976-1977 total combined student population for the two schools in the Harlandale Independent School District is 4,665; the combined student population for the eight high schools in the San Antonio Independent School District is 19,446. The multiethnic make-up of the population of these two districts is a representation of the total cross-section of minority groups in South Texas: 67% of the students in the two local districts have a Spanish-speaking background. Furthermore, students from both the Harlandale and the San Antonio Independent School District high schools are often members of low income families.

Urban environment, low economic status, and the predominance of bi-lingual students in the Harlandale and San Antonio school districts have appropriately provided challenging situations for EBCE program development. The use of community resources to provide career education opportunities for students within these districts required strong coordination and positive support on the part of professional educators, community resource persons, parents, and students. Traditionally, students graduating from high schools of the two San Antonio demonstration school districts are not adequately prepared for career selection or productive accomplishment: no career education program exists at the site. There is a lack of practical application, of individualization, and of off-campus involvement in many existing programs.

In addition to the paucity of career-education advantages, students at these schools have a basic skills deficiency which has been revealed by use of the Comprehensive Tests of Basic Skills. The mean ninth grade score from one high school in the proposed site fell behind the norm group in all six basic skills areas by 1.75 grade equivalents. A 2.3 lag in language development and 1.8 deficiency in mathematics occurred. The dropout rate at this school campus has been more than 7% per year. Of 818 seventh grade students in 1970, only 509 were enrolled five years later in the twelfth grade.

In South Texas and in San Antonio, entire groups of people are trapped into social and career ruts by ignorance of opportunities. Whether the opportunities are for immediate jobs, career development or training, or assistance along the path of career development, ignorance prevails from generation to generation. Public school efforts to overcome these problems have not been effective due to factors such as:

- the lack of resources to renew programs and practices
- the lack of curricular models to implement
- the lack of a catalyst for change
- the inability to prevent student dropouts.

As a result of intensive planning and review of local needs data it was determined that (1) a strong EBCE program was needed in San Antonio, (2) a demonstration of such a program would help ESC, Region 20, educators who need to upgrade their programmatic offerings, (3) the NWREL model for EBCE offers maximum potential in South Texas, and (4) local resources are available to begin a satisfactory demonstration program when supplemented by a demonstration grant.

Goals and Objectives

The major project objectives for the first year were:

- Install and ready for operation the Northwest Regional Educational Laboratory EBCE model in two discrete independent school districts geographically situated in the City of San Antonio.

- Operate the program for one quarter, providing a maximum of forty students with EBCE benefits as specified in Part IV, Part D, Project Approach, of the San Antonio EBCE Demonstration Project proposal.

- Establish ancillary relationships and operationalize a third party evaluation conducted by Research for Better Schools.

- Plan details of dissemination/demonstration plan.

Results

Project staff were selected through the usual procedures employed by the participating school districts. Each district selected a project manager, a student activities specialist and a learning manager. Staff members were trained in special sessions by personnel from the Northwest Regional Educational Laboratory. The selection and preparation procedures appeared to result in a staff adequate for implementing the program.

Staff orientation and training occurred in two stages. The first was a staff awareness and program planning session from January 3, 1977 through January 5, 1977. The second was an intensive staff training session from January 18, 1977 through January 20, 1977. Both sets of sessions were conducted by Northwest Regional Education Laboratory staff. (See Appendices, pp. 113 - 134)

The awareness sessions included the learning center staff members from each of the two learning centers as well as teachers, counselors, as district administrators from the Harlandale Independent School District and the San Antonio Independent School District. These sessions introduced EBCE and the San Antonio project, described the learning projects and strategies, and discussed the roles of students, staff, and community participants.

The intensive staff training sessions later in January involved only project staff. There were three representatives from the San Antonio District, three from the Harlandale District, two from Education Service Center, Region 20, and one consultant from NWREL. In these sessions the details of actually implementing an EBCE program were explored in depth. Program procedures, staff responsibilities, and student activities were discussed to prepare for operating the EBCE project.

Learning resources consisted of those in the learning center and those provided at community sites. Each district established a learning center in one of the district's school buildings. One of these centers had inadequate space and was improved during the summer. Both school districts began to acquire learning materials for the centers. Community sites were recruited in abundance, with 45 for the Harlandale

Independent School District Learning Center and 41 for the San Antonio Independent School District Learning Center. Some needs have been noted in preparing the sites for work with students.

Students were selected in both school districts using a stratified random procedure for program and control groups. Many more students applied for the San Antonio Independent School District program than was true for the Harlandale Independent School District, but both districts were able to meet the need for 20 experimental students and 20 control students.

In both districts the project staff members shared responsibility for developing students' learning plans. The planning task was more centralized with the learning manager at the San Antonio Independent School District Learning Center, while each Harlandale Independent School District Learning Center staff member had charge of a group of students. All learning plans were carefully developed with knowledge and awareness of each student's needs and interests.

The implementation of learning activities proceeded successfully with all students completing the major project requirements:

4	Awareness Visits
2	Explorations
1	Learning Level Project
2	Life Skills Projects
5	Functional Competencies

Most requirements involved the use of community sites as well as learning center staff and resources. Given the brief time period available to plan and implement the program (January 3, 1977 - May 20, 1977), this activity completeness represents a substantial accomplishment.

Participant-perceived effects questionnaires were administered to all experimental program students, their parents, and community site representatives. The results were strongly supportive of the program, indicating that the program is perceived very favorably by participants and considered to be a valuable addition to the educational system.

The avoidance of sex-role stereotyping was an important aspect in the program plan relevant to staff training, community site development, student placement, and personal counseling. An external advisory committee was planned in each district to review project activities as they related to the avoidance of sex-role stereotyping. These committees were composed but not operationalized. Developing these committees as active groups remains a priority for 1977-1978.

As public awareness of sex-role stereotypes expands, attempts to identify causes and propose models for change continue to grow. An increasing number of organizations are publishing career guidance materials directed toward the potential of men and women in traditional occupations.

Identification of a learning kit, Sex Fairness in Career Guidance has been made and acquired. Staff training sessions have been designed based upon this model.

MAJOR ACTIVITIES AND EVENTS

Selection and Preparation of Staff

One of the first steps in operationalizing the San Antonio experience Based Career Education Demonstration Project was the selection of the program staff. The objective of this activity was to employ professionaly trained and certified individuals meeting the specifications of the staffing plan.

Both the Harlandale Independent School District and the San Antonio Independent School District employed three professional staff members:

> Project Manager to coordinate, supervise and maintain overall management for the District's learning center.
>
> Student Activities Specialist and Guidance Counselor to establish, coordinate, and conduct an effective student activities, guidance, and counseling program.
>
> Learning Manager to establish, coordinate, and supervise all activites of the learning center.

These positions were advertised and processed through the normal channels used by each school district.

Staff selection was completed late in December. In early January, 1977, initial staff orientation and training occurred in two stages, as outlined on page 19 of this report.

Staff preparation continued during the year in two forms. First, a weekly coordination meeting was instituted to include the project managers and the ESC-20 staff. These meetings were used to review progress and problems and assure program implementation according to the plan. Second, special sessions were conducted by the NWREL training staff. This included sessions on March 15, for the San Antonio Independent School District staff, on March 16 for the Harlandale Independent School District staff, and on March 17 for the combined learning center staffs. The sessions were designed to allow exploration of problems and questions that arouse based on staff experience with the program.

During the summer of 1977, an outside consultant was engaged to provide 5 days of staff development training.

Preparation of Learning Resources

In addition to staff, the availability of other learning resources is a significant factor in the successful implementation and operation of the program. The San Antonio EBCE Demonstration Project plan calls for a series of learning center resources and a series of community site resources.

The San Antonio Independent School District Learning Center is located in a new, air-conditioned middle school. The project has been allocated two large classrooms which have been refitted to meet the needs of an EBCE facility. The Harlandale Learning Center initially was housed in an old elementary school. Both the location and space were inadequate and attempts by the staff to adapt the limited space to their needs were unfruitful. Subsequently, the learning center was moved to a commercial building with some 2,445 square feet of floor space allocated to the project.

The process of identifying, ordering, processing instructional learning materials to support student work in career projects and academic areas was initiated. Such resources are important in meeting student needs and assuring comprehensive educational opportunities. The development of this learning resource area remains a high priority for the second and third year of implementation.

Both districts have gained the commitment of a substantial number of community learning sites. A potpourri of sites have been recruited and are being used representing retail sales, government, health services, communications, manufacturing, engineering finance, public services, social services, and data processing. These sites represent a diversity of resources which have proven sufficient to initiate the program. Learning site analysis, individually and as a group, is still underway and will continue to remain a priority for the next two years. Since both school districts draw from the same metropolitan area, it has become necessary to coordinate the recruitment effort across districts.

Lists of actual sites recruited by the two school district learning center staffs are detailed in the Third Party Independent Evaluators Annual Evaluation Report, which is subsumed in this Annual Interim Report.

Selection of Students

Student groups were selected from each of the two participating school districts. Twenty experiemental and 20 control students were identified in both the Harlandale and San Antonio Independent School Districts. All selections were made on a random basis, using numbers, by a staff member who had no identifying information on students. The experimental and control groups appear to be roughly equitable on sex and ethnic group distributions. Student groups were selected without intentional bias in both districts. The groups selected meet the requirements of the proposal. Parental permission for student paricipation in the program was also secured.

Preparation of Student Learning Plans

The learning plan cycle describes a logical pattern that is reflected in virtually all student/program interactions and is repeated constantly through the development of individual learning plans. The cycle guarantees consistency of treatment among all student learning activities and includes four basic phases:

> Assessment: the gathering and continual updating by staff and students of diagnostic information about each student's learning style, interests and abilities
>
> Prescription: the planning of individual activities, resources and criteria for learning strategies based on individual assessment data and negotiated to meet both individual and program goals
>
> Evaluation: judging performance of learning strategies general growth in terms of each student's expressed goals and assessed abilities
>
> Integration: helping student reflect on a synthesize learning experiences and refine self-concepts and career/lifestyle goals as part of a total growth process

Following the initial assessment phase, student and staff negotiated learning goals, activities, performance criteria and resources commensurate with each student's identified needs and expressed interests. An important staff responsibility has been the helping of student's to creatively design a plan that will meet both learning and personal development goals through each of the program's learning strategies: career explorations, projects, learning levels, competencies, journals and employer seminars.

After individual student assessments were completed, students and staff members negotiated individualized learning plans that brought together all three curriculum components: basic skills, life skills, and career development.

Learning plans were given structure by student performance in carrying out project activities such as competency certification, journals, career explorations, learning level projects, life skills projects, employer seminars, and career awareness visits. Upon completion of the learning activity, student, staff and community resource personnel evaluated the activity and reassessed the student's abilities, interests and needs for integration into the next learning activity.

During the course of the 12 week implementation period, each student was required to complete 4 Awareness Visits, 2 Explorations, 1 Learning Level Project, 2 Life Skill Projects, 5 Functional Competencies, 2 Career Seminars and make a minimum of one weekly entry in their Student Journals.

Avoidance of Sex-Role Stereotyping

The project proposal calls for the creation of an external advisory group to suggest and review procedures relating to several program aspects.

An external review committee has been established for each of the two participating school districts. In the Harlandale Independent School District, five persons have been nominated. They represent community, the PTA, the school board, the school counselors, and the school cafeteria staff. In the San Antonio Independent School District, seven persons were nominated. These seven represent parents, community workers, the PTA, school counselors, the school board, and an employment agency.

The committees did not become operational during the initial implementation phase.

The staff training sessions presented by NWREL consultants addressed the avoidance of sex-role stereotyping. Indications based on discussions in staff meetings are that the staff has developed an awareness of associated problems and are acting appropriately to avoid stereotypes in the program.

No suggestion of stereotyping has been found in selection, preparation, or student placement in community site resources. Non-traditional career roles were presented, as females pursued law and disk jockey careers and males prepared for nursing and elementary teaching.

During the implementation phase, the staff were aware of the problems created by sex-role stereotyping and attempted to deal with them in counseling and other program elements.

PROBLEMS

- Late notification of the project grant award

- Change in participation in the San Antonio Experience Based Career Education Demonstration Project by the San Antonio Independent School District and the need to identify a replacement district before implementing the proposal.

- Late approval, December 1976, by both participating school boards in naming the EBCE project staffs for their respective school district.

All of the foregoing have created time-line slippage in some aspects of the San Antonio Experience Based Career Education Demonstration Project implementation plan. Project activities most directly affected by this slippage were staff selections, appointment of members to advisory councils and external review committees; orientation of the community, parents and students, regarding the project; conducting EBCE staff inservice training; recruitment and selection of community resource learning sites.

- Liability Insurance due to the peculiarity of Texas State insurance laws has not been available to support the project. Although students in the project are being provided health and accident insurance coverage, the project was not able to identify appropriate liability insurance that would provide protection and relief to the community employer sites in the event a student was injured. This matter has been referred to the Texas Education Agency.

PUBLICITY ACTIVITIES

Printed materials generated during the initial implementation include:

EBCE: New Careers Program Offers Varied Study.
San Antonio ISD Schoolnotes: Vol. 4, No. 2,
February 2, 1977

EBCE Comes to Harlandale.
Harlandale ISD News: Vol. IV, No. 2, March 1977

Radio coverage during the start-up period has been provided by:

Station KKYX, March 7, 1977

Station KCOR, March 8, 1977

Station KUKA, March 9, 1977

Station KTSA, March 15, 1977

DISSEMINATION ACTIVITIES

Materials, information and presentations have been made for the following named groups:

Education Service Center, Region 10
P.O. Box 1300
Richardson, Texas 75080

Education Service Center, Region 8
100 North Riddle
Mt. Pleasant, Texas 75455

Education Service Center, Region 7
P.O. Box 1622
Kilgore, Texas 75662

Education Service Center, Region 11
2821 Cullen Street
Fort Worth, Texas 76107

Education Service Center, Region 19
6611 Boeing Drive
El Paso, Texas 77001

Texas Education Agency
201 East Eleventh Street
Austin, Texas 78711

Education Service Center, Region 4
P.O. Box 863
Houston, Texas 77001

Education Service Center, Region 13
6504 Tracor Lane
Austin, Texas 78701

San Marcos Independent School District
San Marcos, Texas

Representatives from the U.S. Office of Education, Health Education and Welfare, Region VI, and the Texas Education Agency visited the project May 9-10, 1977

DATA COLLECTION AND EVALUATION

One component of the project is a third-party evaluation conducted by

Research for Better Schools, Incorporated. A detailed "Evaluation Plan"[3] was prepared by Research for Better Schools to meet the U.S. Office of Education specifications.[4] This plan included a design for evaluating the program implementation process and the student outcomes associated with participation in the program.

The process evaluation focused on program elements deemed essential for a valid demonstration of the EBCE model. Standards of performance were established for each element based on the project proposal and the NWREL model description. Related data were gathered through structured observations, interviews, and reviews of project files on the part of the third-party evaluator's representative. The evaluator spent three weeks on site in February, April and June to collect the necessary information.

The outcome evaluation was designed to test a set of hypotheses related to student development in career, life and basic skills. A true experimental design was employed with pretest and postest administrations of the instrument package. Testing was conducted in a standardized manner by the project staff under the direction of the evaluator. All analyses were completed at Research for Better Schools, Incorporated. Test result summaries in the form of individual and group profiles for the pretest and posttest were submitted to the Project Director and subsequently transmitted to the project staffs.

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[3] "Evaluation Plan for Third Party Evaluation of The Experience Based Career Education Program of the San Antonio Educational Service Center" Office of Planning and Evaluation, Research for Better Schools, Philadelphia: December 1, 1976.

[4] Federal Register, Vol. 40, No. 220, Thursday, November 13, 1975, p. 5264

A process and outcome evaluation was thus conducted by Research for Better Schools, Incorporated utilizing staff trained and experienced in the evaluation of Experience Based Career Education. The effort included a senior evaluator, statistical clerk, programmers, and other staff resources.

STAFF EMPLOYMENT AND UTILIZATION

The staffing pattern for the San Antonio Experience Based Career Education Demonstration Project was defined at the outset of budget planning. From the outset, staffing conceputalization was based on the premise that EBCE required a professional staff vastly different from the faculty of a traditional high school. In this project, staff members are managers and facilitators of student learning, not "teachers" in the traditional sense; their functions are defined according to student and program needs rather than by subject matter. The San Antonio program requires a staff of skilled professionals who can:

- work with students individually to negotiate develop personalized learning programs
- deal directly with community members to develop learning opportunities for students in businesses, industry, social and service agencies, government offices--wherever adults are working

- draw on the community for both materials and people to serve as resources for student learning
- attend to the many services that support the student from time of entry to time of exit from the program, including monitoring student progress and reporting to parents
- administer the program and maintain ongoing community liaison.

The professional staff at each of the two learning centers is comprised of a learning manager, learning resource specialist, and an employer relations specialist/project manager.

The learning manager helps students assess their own needs, interests and goals, works with students to negotiate individualized learning plans and coordinates student learning activities and site experiences with other staff members, students and adults in the community. Mr. Robert Maddox serves as learning manager for the Harlandale Learning Center; Miss Janet Lynn fulfills that responsibility for the San Antonio Learning Center.

The learning resource specialist helps locate people, materials and other community resources to aid students in their individualized programs of study, recruits tutors, coordinates competency certification and suggests learning resources to learning managers. The learning resource specialist also maintains instructional media at the learning center for student access. Mrs. Sally Halstead is the learning resource specialist at the Harlandale Center; Mrs. Edna Christopher is the learning resource specialist assigned to the

San Antonio Center.

The employer relations specialist/project manager recruits potential employer and community sites and employer instructors, assists students in selecting sites and arranges for student placements. The employer relations specialist/project manager also assists employers in identifying potential learning experiences for students and confers with the learning manager on student projects.

Mr. Raul Barrera was initially named by the Harlandale Independent School District to fulfill the employer relations specialist/project manager's role at their learning center; Mr. Louis Antu is currently fulfilling this function for the San Antonio Learning Center. Initially, Mr. Sebastian Sanchez had been named by the San Antonio Independent School District as employer relations specialist/project manager for their learning center, but has subsequently been reassigned to a school principalship.

The ancillary and/or support staff consists of a secretary and van driver.

The secretary provides secretarial and support services to the program team in general and especially assists the employer relations specialist in maintaining records relating to student placement on employer sites. The secretary also serves as telephone receptionist. In addition, she performs various tasks required for maintaining reports, program operation as well as arrange for meetings and handling appointments and correspondence.

The van drivers, employed on a nine month basis, operates the vans assigned to each of the two learning centers. Their responsibility includes moving students around the community and coordinating the schedules of students using the program's transportation service.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

The Harlandale Independent School District and the San Antonio Independent School District Learning Center Staffs did a commendable job in planning and implementing the San Antonio Experienced Based Career Education Demonstration Project. The San Antonio program model requires the recruitment of a large number of community sites, the retraining of staff for new roles, the recruitment of students, the orientation of students, and the implementation of a complex program model. The model was implemented well. The learning and student activities staff members displayed a competence and a developing sophistication in the performance of their roles. Students met the specific activity requirements of the model. This first year represents an excellent initial implementation of EBCE.

The outcome evaluation demonstrated a very strong comparative effects in attitudes toward school, self acceptance, and others acceptance.

These important life skills were positively affected by participation in the program. The career skills results showed no consistent patterns of difference between the program and control students. This finding must be interpreted with cognizance that the program was of very limited duration and involved small numbers of students. The time for growth was constrained and the potential for significance lowered by the small samples. The second year (first complete academic year) will provide a better test of the outcome hypotheses.

The project when reviewed in terms of its proposed objectives and the relevant federal requirements is perceived to be in compliance with stated objectives and regulations, meeting both the letter and intent.

Recommendations:

A series of recommendations has been formulated to assist in refinement of the program for the second and third operational years.

Period of Grant

Currently the period of grant is September 15, 1977 through September 14, 1978, both dates inclusive. School districts in Texas operate an academic year commencing on or about September 1 and extending through May 30. The period of grant and the operational year for school districts should be coterminous with the grant period.

A request for a change in grant period has been directed to the regional office. A decision on this recommendation needs to be made on or before the end of the second year of operation as the matter is of critical importance to both of the school districts under sub-contract with the grantee.

Program Coordinator

Eliminate the position of a full-time program coordinator

Develop Learning Center Resources

Experience-based learning combines the best elements of academic classroom learning with the best of learning by doing. It broadens the base of the classroom to make the whole community the learning environment.

Although many of the career and academic skills needed by students can be supplied through community sites, substantial and accessible materials are needed in the learning centers to support vicarious exploration and to fulfill diagnosed needs. Both project learning centers have indicated some development, but a more concentrated effort is needed, especially as 11th grade students move into the program.

Liability Insurance

Insurance laws peculiar to the State of Texas do not encourage insurance underwriters to satisfy those requirements whereby certificates of insurance can be issued by carriers to provide the grantee with employer liability coverage on community site premises. Some exploration at both the state and national level is probably warranted here.

The grantor should hold in abeyance and/or wave the federal guideline requirements relating to employer liability coverage until appropriate insurance coverage becomes available on the Texas market.

Student medical and accidental death coverage is available and has been provided the San Antonio Experience Based Career Education Demonstration Project by Aetna.

Activate Committees for the Avoidance of Sex-Role Stereotyping

These committees have been initiated, but no formal activities have been undertaken. This remains a project priority.

Coordinate Use of Community Sites Serving Both School Districts

Several community sites have been recruited and utilized by both the Harlandale Independent School District and the San Antonio Independent School District. Since the school districts exist in close proximity, this is a natural occurrence. It does however, hold some problematic potentials. Procedures must be designed to avoid harmful potentials.

Develop Procedures for Preparing Community Site Personnel

Several operational problems involving the community sites have occurred. Also, it is apparent that differing views on the program goals and procedures are held. An orientation packet needs to be prepared to faciliate an understanding of the program in a written form. Verbal presentation to prospective participants should also be standardized so that consistent and complete information is given.

Review Site Analysis Procedures

The present site analysis forms are cumbersome and possibly not necessary in full form for all sites. The exact data needs for student program planning should be addressed.

Maintain Communication With Sites Which Are Recruited But Not Used

Both Harlandale Independent School District and the San Antonio Independent School District list many sites as recruited, but unused by students. This is a desirable condition for the program, but it raises a potential problem. Sites may be "put off" by having given a commitment which then is not exercised. Procedures to obviate this type of occurrence need to be developed.

Select More Alternates as Back-up for Student Control Groups

Dropouts from the San Antonio Independent School District project earlier this year resulted in the transfer of students from the control group. While this procedure has practial merit, it detracts from the evaluation effort.

Review Staff Roles

Discussions about staff roles with various staff members led to the conclusion that the two different school districts used different role definitions, and complete disregard of the definitions developed by the prime sponsor; concomitantly, some problems in complete coverage of responsibility or level of efficiency have been encountered. Staff role structuring in practice should be centrally coordinated and the benefits of the Northwest Regional Education Laboratory experience in this area needs to be applied.

Other

Several program aspects are duly noted as behind schedule due to the late notification of the grant award and commensurate with that, the late implementation of the project. This includes the external advisory committee, the dissemination plan, and implementation of the employer seminars. These minor problems will be corrected.

SAN ANTONIO EBCE
DEMONSTRATION PROJECT

1976-1977
Annual Evaluation Report

RESEARCH FOR BETTER SCHOOLS, INC.
1700 Market Street
Philadelphia, Pennsylvania 19103

August 1, 1977

SAN ANTONIO

EBCE DEMONSTRATION PROJECT

ANNUAL EVALUATION REPORT

1976-1977

Submitted to

Mr. William Lafferty
EBCE Program Director
Education Service Center, Region 20
1550 N. E. Loop 410
San Antonio, Texas 78209
(512) 828-3551

Submitted by
Dr. Keith M. Kershner
Director of Evaluation
Research for Better Schools, Inc.
1700 Market Street
Philadelphia, Pennsylvania 19103
(215) 561-4100

August 1, 1977

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I. INTRODUCTION

The San Antonio Experience Based Career Education (EBCE) Program is an implementation of the Northwest Regional Educational Laboratory EBCE model. This model is one of the four developed under the sponsorship of the U. S. Office of Education and the National Institute of Education. The San Antonio program is a three-year effort funded through the U. S. Office of Education with Vocational Education Act monies for Exemplary Projects. The program funding guidelines called for an objective, third-party evaluation which was designed and conducted by Research for Better Schools (RBS). This report describes the evaluation activities and presents the first year results.

Program Description

Experience Based Career Education has been designed to assist youth in making a successful transition to adulthood. It employs procedures which promote career skills, life skills, and basic skills. A key program ingredient is extensive experience with business, agency, and organization sites in the community. This out-of-school experience is carefully guided by staff educators and complemented by a variety of learning materials and strategies. Program models for Experience Based Career Education have been developed by four educational laboratories.[1] The

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[1] Northwest Regional Educational Laboratory in Portland, Oregon; Research for Better Schools in Philadelphia, Pennsylvania; Appalachia Educational Laboratory in Charleston, W. Virginia; and Far West Laboratory in San Francisco, California.

Northwest Regional Educational Laboratory (NWREL) model was selected for implementation in San Antonio.

The project has been designed and supervised by the grant recipient, Education Service Center - Region 20 (ESC-20). As part of the public education system of Texas, ESC-20 is a regional service agency covering a 14 county area in the South-central section of the state. The EBCE program is directed by Mr. William Lafferty, Deputy Executive Director of ESC-20. Another ESC staff member, Dr. Maurice Hartle, serves as the Project Coordinator. These persons have overall responsibility for the San Antonio EBCE program.

The program has been implemented in two school districts, the Harlandale Independent School District (HISD) and the San Antonio Independent School District (SAISD). Both districts are in the metropolitan San Antonio area, with SAISD covering the center of the city and HISD serving the the South-central area. Each district has designated a staff consisting of a project manager, a counselor, and a learning manager. The individuals chosen at HISD for these positions respectively were Raul Barrera, Sally Halstead, and Robert Maddox. The staff serving SAISD were Sebastian Sanchez, Edna Christopher, and Janet Lynn. Each school district operated a program for 20 twelfth grade students. Thus, a total of 40 students participated in the first year of San Antonio's EBCE program. Students and staff utilized a central facility in each of the school districts and a number of business and agency sites throughout the community.

The program plan[2] establishes both the need for this kind of program in the San Antonio area and the guidelines for its implementation. The program is a demonstration project using the NWREL model of Experience Based Career Education. This model seeks to help secondary school students prepare for adulthood and economic self-sufficiency. It intends to further students' career development, life skills, and basic skills.

Several learning strategies are employed to meet these objectives. Students explore and learn in natural work settings by using the network of community sites recruited to participate in the program. The experience in work settings is strictly for educational purposes and no pay is received. Students also complete projects based on problem-centered learning contracts individually negotiated to help them achieve their learning goals and make efficient use of their experiences in the community. A set of functional competencies, or survival skills are identified and students are required to achieve proficiency in them. Finally, students maintain a written journal about experiences in the program and participate in seminars conducted by employers and other community representatives.

Each student is guided by a learning plan which is developed by the project staff with awareness of individual needs and interests. Students meet a set of prespecified requirements while in the program and receive regular school credit for their work. Students are expected to spend approximately half of their time in the community and the remainder at the project central site, or learning center. All activities are carefully monitored by the project staff.

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[2] "San Antonio Experience Based Career Education Demonstration Project." ESC-20. San Antonio: (Reprinted) October 14, 1976.

The first term of the San Antonio program began for students during the week of February 21, 1977 and concluded the week of May 23, 1977. The initial implementation was thus abbreviated in duration; two full program years are anticipated for 1977-1978 and 1978-1979.

Evaluation Procedures

One component of the project is a third-party evaluation conducted by Research for Better Schools. A detailed "Evaluation Plan"[3] was prepared by RBS to meet the U. S. Office of Education specifications.[4] This plan included a design for evaluating the program implementation process and student outcomes associated with participation in the program.

The process evaluation focused on program elements deemed essential for a valid demonstration of the EBCE model. Standards of performance were established for each element based on the project proposal and the NWREL model description. Related data were gathered through structured observation, interviews, and reviews of project files. The evaluator spent three weeks on site in February, April, and June to collect the necessary information. Schedules of the site visit activities are presented in Appendix A. After each of the first two site visits interim reports (March 15, 1977 and May 5, 1977) were prepared and submitted to the Project Director. These reports concentrated on the process evaluation and recommendations for improvement of the program.

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[3] "Evaluation Plan for Third Party Evaluation of the Experience Based Career Education Program of the San Antonio Educational Services Center." Office of Planning and Evaluation, Research for Better Schools, Philadelphia: December 1, 1976.

[4] Federal Register, Vol. 40, No. 220, Thursday, November 13, 1975, p. 52964.

The outcome evaluation was designed to test a set of hypotheses related to student development in career, life, and basic skills. A true experimental design was employed with pretest and posttest administrations of the instrument package. Testing was conducted in a standardized manner by the project staff under the direction of the evaluator. All analyses were completed at RBS. Test result summaries in the form of individual and group profiles for the pretest and posttest were submitted to the Project Director on June 6, 1977.

A process and outcome evaluation was thus conducted by RBS utilizing staff trained and experienced in the evaluation of Experience-Based Career Education. The effort included a senior evaluator, statistical clerks, programmers, and other staff resources.

Report Organization

The purpose of this report is to present the findings of the first year evaluation of San Antonio's Experience Based Career Education Program. Section II below is devoted to the process evaluation; evidence related to each essential program element is presented and discussed.

Section III treats the outcome evaluation, which is presented in a research format including objectives, procedures, and results. Both of these sections reflect the organization of the "Evaluation Plan". This report depicts the project at year-end; the interim evaluation reports may be consulted for additional information.

Section IV contains an abstract of the requirements of the U. S. Office of Education related to Exemplary Projects in Vocational Education. The San Antonio project is then compared with these requirements to determine to what extent the funding agency intentions were fulfilled.

Section V summarizes the evaluation procedures and findings. A final section presents recommendations which are intended to be helpful to the project staff in refining the San Antonio EBCE project.

II. PROCESS EVALUATION

This component of the evaluation was designed to provide information on each of the major elements necessary for successful implementation of the EBCE program. These elements have been categorized as follows:

1. Selection and preparation of staff
2. Preparation of learning resources
3. Selection of students
4. Preparation of learning plans
5. Implementation of learning activities
6. Avoidance of sex-role stereotyping

Implementation standards in each area were developed by the evaluator based on the project proposal and the NWREL model.

Information pertinent to evaluating the program elements was obtained during the three site visits made by the evaluator to the San Antonio project. The implementation of each element was directly observed. Each staff member was interviewed several times. All project files and records were reviewed by the evaluator during the course of each site visit.

A major function of the process evaluation was to provide feedback and recommendations to the project staff regarding the essential program elements. This was accomplished via a debriefing with the Project Director at the conclusion of each site visit and the preparation of interim reports. The process evaluation was also intended to document the extent to which the intended program was actually implemented. This latter intent is served by the present report. Each of the program elements is discussed below in terms of objectives, procedures, and results.

Selection and Preparation of Staff

One of the first steps in operationalizing an EBCE program is the selection of required program staff. The objective of this process is to acquire individuals meeting the specifications of the staffing plan. After selection, staff orientation and training is necessary to consolidate staff commitment to the program and to provide them with the information and skills needed to perform their roles in the program.

Both HISD and SAISD specified three staff positions summarized as follows:

PROJECT MANAGER - to coordinate, supervise and maintain overall management for the EBCE project. Requirements:

- administrative certification or eligibility
- successful experience in public school teaching and proper certification
- other district requirements

STUDENT ACTIVITIES SPECIALIST AND GUIDANCE COUNSELOR - to establish, coordinate, and conduct an effective student activities, guidance, and counseling program. Requirements:

- qualifications and certification as a counselor
- competencies in working with individualized instruction programs

- capability in diagnostic and evaluative testing
- interpersonal relations skills
- other district requirements

LEARNING MANAGER - to establish, coordinate, and supervise all activities of the learning center. Requirements:

- successful experience in classroom teaching and supervisor's certification
- experience in an individualized instruction program
- proficiency with multi-media approaches to education
- ability in individual student diagnosis and program prescription
- ability to develop learning activity modules for students
- proficiency in selection, procuring, and cataloging instructional materials, equipment, and supplies
- other district requirements

These positions were advertised and processed through the normal channels used by each school district, and the successful applicants were selected by January, 1977. The selection process and resultant staff were reviewed by the evaluator. With the exception of the Project Manager's job description, which was too general in requirements, the procedures appeared to be adequate. Staff files were inspected and staff members were interviewed. The staff in both sites appeared to be qualified for their roles in the EBCE project by virtue of background and interest in innovative programs.

Staff orientation and training was the next task. This occurred in two stages. The first was a staff awareness and program planning session from January 3, 1977 through January 5, 1977. The second was an intensive staff training session from January 18, 1977 through January 20, 1977. Both sets of sessions were conducted by NWREL staff.

The awareness sessions involved the EBCE staff members as well as approximately 25 teachers and counselors from the HISD and SAISD. These sessions introduced EBCE and the San Antonio project, described the learning projects and strategies, and discussed the roles of students, staff, and community participants.

A participant evaluation form was given to each of the persons attending these sessions. Ratings were solicited in six areas for each of the three conference days. The results of the survey are presented in Table 1. The response scales ran from 7 = favorable to 1 = unfavorable, with different anchor words for the various items. The average response values were calculated on each item for the three conference days. As can be seen, the participant reactions were extremely favorable, with most averages near or above the 6.00 level.

The intensive staff training sessions later in January involved only project staff. There were three representatives from SAISD, three from HISD, two from the ESC-20, and one consultant from NWREL. In these sessions the details of actually implementing an EBCE program were explored. Program procedures, staff responsibilities, and student activities were discussed to prepare for operating the EBCE project.

Table 1

Participant Evaluation of Awareness Sessions

Item	Scale	Average Response		
		Day 1	Day 2	Day 3
1. The organization of this program was	7 = Excellent 1 = Poor	5.75	5.74	6.46
2. The objectives of this program were	7 = Clearly Evident 1 = Vague	6.19	6.07	6.46
3. The work of the consultants used was	7 = Excellent 1 = Poor	6.00	6.15	6.52
4. The ideas and activities in this program were	7 = Very Meaningful 1 = Meaningless	5.77	6.00	6.62
5. The scope of this program was	7 = Very Adequate 1 = Inadequate	5.93	5.85	6.50
6. Involvement in this program should prove	7 = Very Beneficial 1 = No Benefit	6.31	6.56	6.65
7. Overall, I consider the value of this program to be	7 = Very High 1 = Of No Value	6.26	6.52	6.81

A brief evaluation questionnaire was administered to the school district staff at the conclusion of these training sessions. Among the six respondents, all indicated that the purposes of the sessions, their expectations, and their own needs had been met. The strengths of the training were listed to include the close, small group atmosphere; the skills of the trainer; the use of examples; attention to specifics; and good structure. Four of the staff could cite no weaknesses; the other two suggested that more time was needed to cover all program aspects. When questioned about program elements that were still somewhat unclear, one respondent mentioned project scheduling and another listed site recruitment. Additional, short-term technical assistance needs were requested in the form of advice on problems and more training after staff have had experience in operating the program.

These results suggested that the initial preparation activities were successful in meeting most perceived needs. Individual interviews with the staff members corroborated the survey results.

Staff preparation continued during the year in two forms. First, a weekly coordination meeting was instituted to include the project managers and the ESC-20 staff. These meetings were used to review progress and problems and assure program implementation according to plan. Second, special sessions were conducted by the NWREL training staff. This included sessions on March 15 for the SAISD staff, on March 16 for the HISD staff, and on March 17 for the combined staffs. The sessions were designed to allow exploration of problems and questions that have arisen based on staff experience with the program.

The evidence in this process area suggests that the staff element has been successfully implemented. Adequate personnel were recruited to meet the staffing plan; and they were provided with orientation and training which was apparently effective in preparing them for their roles in the program.

Selection and Preparation of Learning Resources

Just as the staff heavily influence program success, the availability of other learning resources is a central factor in program value. The program plan calls for a series of learning center resources and a series of community site resources. The learning center is intended to provide the resources needed to make the program a comprehensive alternative to regular school. The community sites are essential for enabling the experiential learning which is central to the EBCE model. The process objective is to acquire the planned resources and prepare them for use in a manner which meets the needs of participating students.

The SAISD learning center was located in the Tafolla Junior High School. The project has been allocated two large rooms which have been refitted to meet the needs of an EBCE facility. The HISD learning center was housed in one classroom of the Rayburn Elementary School. Staff have done their best to adapt the room to their needs, but the facility lacks the space and equipment necessary for successfully implementing the program. Plans have been made for a new center location for next year.

The process of supplying the learning centers with materials to support student work in career projects and academic areas was initiated but not completed. Such resources are important in meeting student needs and assuring comprehensive educational opportunities. The development of this learning resource area remains a high priority for next year.

Both SAISD and HISD have gained the commitment of a substantial number of community learning sites. SAISD has recruited 41 sites, representing finance, communications, retail sales, social services, government, health services, manufacturing, engineering, construction, data processing, and other areas. HISD has established 45 sites, representing careers in retail sales, health services, manufacturing, engineering, finance, public services, social services, communications, data processing, real estate, and other areas. Lists of the actual sites for each school district are presented below.

SAISD Community Learning Sites

1. Southwestern Bell Telephone
2. Kelly A.F.B.
3. Newell Salvage & Manufacturing
4. Ancira & Winton Chevrolet
5. Lutheran General Hospital
6. Guadalupe Community Center
7. Frank Leal & Associates
8. USAA Insurance Co.
9. K L R N - Channel 9
10. Kingston Manufacturing
11. Middleman Pharmacy
12. San Antonio College
13. Ella Austin Community College
14. San Antonio Light
15. Pitluk Advertising Agency
16. Texas State Bank

17. Brooks School of Aerospace Medicine
18. Metropolitan Health District
19. Business Resource Center
20. Rodriguez Elementary School
21. San Antonio Police Department
22. Hilton Palacio Del Rio
23. The Unlimited Pencil
24. Guadalupe Lumber Co.
25. Blanco Pharmacy
26. Paul Anderson
27. Beldon Roofing & Remodeling
28. Frost National Bank
29. Economy Aviation
30. San Antonio State Hospital
31. U. T. S. A.
32. Pape Dawson Engineering
33. Williard E. Simpson
34. San Antonio Fire Dept.
35. J. T. Daniel, D.D.S.
36. UTSA Medical School (Dental)
37. H. B. Zachry
38. Gleason Veterinarian Hospital
39. Westside Professional Building
40. Xerox
41. San Antonio Legal Department, Tax Division

HISD Community Learning Sites

1. Unique Printers
2. ILFCO
3. ROTC Department, Harlandale H.S.
4. Palm Heights Mortuary
5. Harlandale State Bank
6. Alamo Enterprises
7. Harlandale Independent School District, Driver Education
8. Mission Road Foundation
9. Williamson Realty Co.
10. Southside Neighborhood Assistance Corp. (SNAC)
11. Spanish Oaks Nursing Home
12. Hicks Insurance Agency
13. Vestal Elementary
14. Harlandale State Bank
15. Commercial Body Corporation
16. Mission Chevrolet
17. Morman & Mok, Associates

18. Noonan, Crocker & Dockery
19. San Antonio Parks & Recreation
20. San Antonio Fire Dept.
21. San Antonio Police Dept.
22. Jane's Prescription Shop
23. Hardy's Convalescent & Nursing Home
24. Gembler Floral Co.
25. City Water Board
26. Datapoint Corporation
27. Leonard's Beauty Salon
28. KSAT Radio
29. Beauty College
30. KSAT Television
31. Lutheran General Hospital
32. Southeast Baptist Hospital
33. San Antonio Chest Hospital
34. San Antonio Purchasing Dept.
35. Wesley Community Center
36. Job Experts Placement Service
37. Twirling Studio
38. City Public Service
39. Baptist Memorial Hospital
40. Flanders Elementary School
41. Superlative Meat Market
42. Aztec Rentals
43. Wright Elementary School
44. Towne Twin Theater
45. SAC Radio Station

The number and diversity of sites recruited for participation in the program has met the first year program needs. In subsequent years, as the program expands and students are in the field for a full year, a closer analysis of the pool of community sites will be appropriate.

The preparation of community learning site personnel for their participation in the EBCE program is presently conducted on an individual basis through verbal interactions with the project staff. Each district has also held one training session for site personnel. Interviews at a number of the learning sites have suggested that more detailed and structured preparation activities may be helpful. Site participants differed in their understanding of the program and their commitment to it. They also evidenced varying levels of capabilities for dealing with young adults in an educational context. Development of the site preparation procedures would be helpful for future years.

Selection of Students

Student groups were to be selected from each of the two participating school districts. Selection for the program vs. the control group was to be done on a random basis with applicants securing parental approval for involvement in all aspects of the treatment and evaluation. The objectives of this process were to select 20 program and 20 control students in an unbiased manner for each school district and to obtain parental consent for participation.

The SAISD contains eight different high school campuses. During January 1977, project staff members visited each of these schools and made presentations to students interested in the EBCE program. A great deal of enthusiasm was engendered by this process, and a total of 247 twelfth graders applied for admission. Since it was desired that each campus be represented in the program by at least one student, a stratified random selection process was employed. First, one student was selected from each high school; then, the remaining places were filled from schools on a proportional basis depending on their percentage contribution to the applicant pool. The control group was constructed in a similar fashion. All selections were made on a random basis, using numbers, by a staff member who had no identifying information on students.

The results of this selection process are displayed in Table 2. The eight schools contributed quite differentially to the selection pool. The "allocations" are statistical creations representing percent of pool multiplied by the intended group size (20 or 23). In most cases the proportional allocations and actual numbers were close, after accomodating the one student per school rule. However, Lanier was overrepresented and Houston, Edison, and Burbank were underrepresented in the experimental group. The control group distribution was about as precise as is possible using these procedures.

Table 2

SAISD Student Group Composition

Group / School	Applicant Pool	% of Pool	Experimental Allocation	Experimental Number*	Control Allocation	Control Number*
1. Lanier	22	8.91	1.78	4	2.05	2
2. Wheatley	12	4.86	0.97	1	1.12	1
3. Fox Tech	2	0.81	0.16	1	0.19	1
4. Jefferson	30	12.15	2.43	2	2.79	2
5. Houston	48	19.43	4.86	3	4.47	5
6. Edison	51	20.65	5.16	4	4.75	4
7. Burbank	58	23.47	5.87	3	5.39	5
8. Highlands	24	9.72	1.94	2	2.24	3
Totals	247	100.00	20.00	20	23.00	23

*Adjusted from allocation to permit at least one group member from each school.

Table 3 views the various student groups in terms of demographic characteristics. The experimental and control groups displayed relatively similar characteristics.

Table 3

SAISD Student Group Comparison on Demographic Variables

Variables		Applicant Pool	Experimental Group	Control Group
Sex	Female	45.34%	50.00%	65.22%
	Male	54.66%	50.00%	34.78%
Ethnicity	Mexican-American	53.44%	70.00%	69.56%
	Anglo	19.03%	15.00%	8.70%
	Black	19.43%	15.00%	21.74%
	Other	8.10%	0.00%	0.00%

The HISD contains two high schools. Project staff members made presentations to interested students at these schools, and a total of 52 twelfth graders applied for admission to the EBCE program. It was decided to stratify the student groups by both sending school and sex. Thus, of the 20 experimentals, 10 positions were allocated to each school, and of these 5 were for females and 5 for males. Within these strictures selections were made on a random basis. Similar procedures were used for the control group. All selections were performed during a public assembly.

The results of the selection process appear in Table 4. The two schools involved contributed fairly equally to the applicant pool. Under this condition, the even split of places in groups matched the proportional allocations reasonably well. Difficulties would have been encountered had one school or the other provided a preponderance of the applicants but received only half of the places.

Table 4

HISD Student Group Composition

Group / School	Applicant Pool	% of Pool	Experimental		Control	
			Allocation	Number	Allocation	Number
1. McCollum	28	53.85	10.77	10	12.39	11
2. Harlandale	24	46.15	9.23	10	10.61	12
Totals	52	100.00	20.00	20	23.00	23

Table 5 presents demographic characteristics of the various groups. Since information on the applicant pool was based on staff recollection rather than records, comparisons will not be drawn. The experimental and control groups appeared to be roughly equitable on sex and ethnic group distributions.

Table 5

HISD Student Group Comparisons on Demographic Variables

Variable		Applicant Pool	Experimental Group	Control Group
Sex	Female	57.69%	50.00%	52.17%
	Male	42.31%	50.00%	47.82%
Ethnicity	Mexican-American	-	70.00%	73.91%
	Anglo	-	30.00%	26.08%
	Black	-	0.00%	0.00%
	Other	-	0.00%	0.00%

In summary, student groups were selected without intentional bias in both school districts. These groups meet the requirements of the project proposal and should be sufficient for evaluation purposes. Parental permission for student participation in the program was also secured.

Preparation of Student Learning Plans

Individual learning plans establish the method whereby students interact with program resources. These plans organize each student's activities and determine the potential impact of program experiences. It is thus imperative that the plans be carefully constructed with cognizance of the program requirements, student characteristics, and available resources. The objective of this process is to provide each student with a plan that is individualized, based on needs and interests, and reflective of a rational developmental scheme.

Learning plans are given structure by project activities defined and required by the NWREL model. These activities and requirements were adopted by both school districts as follows:

Activities	Number Required
1. Awareness Visits	4
2. Explorations	2
3. Learning Level Projects	1
4. Life Skill Projects	2
5. Functional Competencies	5
6. Career Seminars	2
7. Student Journals	weekly

Each student was required to complete these activities over the course of the 12 week implementation period.

As an aid to planning and monitoring SAISD has adopted the NWREL "zone" approach. The project year was divided into three zones, with requirements and responsibilities assigned to each. Individual students were then given a plan for each zone. HISD used a planning approach which covered the entire project period; for the next year a "zone" approach will also be used.

In both districts the project staff shared responsibility for developing learning plans for individual students. The planning task seemed to be more centralized with the learning manager at SAISD, while each HISD staff member had charge of a group of students. The configuration of staff roles is still emerging.

The actual application of project requirements to student learning activity plans differed between the two school districts. HISD staff prepared four Awareness Visits in which all students participated as a group. SAISD prepared more visits and also permitted students to select other Awareness Visit sites of their choice. Students in both districts were able to choose from the full range of sites available for their Explorations and Learning Level Projects. HISD students all engaged in a single Life Skills Project in American Government, with a second project open to choice. All SAISD students were required to pursue Life Skills Projects in the Critical Thinking and Creative Development areas. SAISD students were scheduled for the same functional competencies as a group, while HISD students selected from among eight recommended competencies.

Student learning plans thus were not approached on a totally individualized basis. Each district elected to complete some activities on a group basis, and others with a limited range of alternatives. The Explorations and Learning Level Projects were developed on an individual and personal basis. All learning plans were carefully created with knowledge and awareness of each student's needs and interests and appeared to meet the program objectives.

Implementation of Learning Activities

If the processes described above have been successfully implemented, a program with adequate staff, students, learning resources, and learning plans will be in operation. The evaluator's view then turns to the ongoing learning activities, the program curriculum. A series of required program activities has been specified. The first process objective in this area is to facilitate each student's completion of the stated requirements. In addition, it is important that the activities be conducted in a manner and with results that are perceived positively by participants. The second process objective is thus to meet the perceived needs of students, staff, and community sites. This report section presents information on student performance related to each activity requirement and the results from participant surveys.

All students met the requirement of four Awareness Visits. HISD students visited four sites as a group: University of Texas at San Antonio, San Antonio Junior College, Baptist Hospital, and the University of Texas Health Science Department. A spokesman from each site gave an overview of pertinent careers, then students proceeded in small groups formed based on interests. These visits lasted approximately one half day.

At SAISD most students participated in group tours of nine sites for Awareness Visits: Kelly AFB, Newell Salvage and Manufacturing, USAA Insurance Co., KLRN-TV, San Antonio Light Newspaper, Texas State Bank, Frost National Bank, University of Texas at San Antonio, and San Antonio State Hospital. These visits were of one to two hours duration. Most students also undertook other visits on their own.

All SAISD students completed the required two Career Explorations; eight students did three of them. Of the 41 available community sites, 23 were utilized for exploration. The distribution of student placements was as follows:

Placements	Sites
1	11
2	2
3	6
4	1
5	1
6	1

Most of the sites (11) had only 1 placement. Three sites, Ella Austin Community Center, San Antonio College, and Xerox, were very popular with six, five and four placements each.

HISD students also met their Career Exploration requirement, six students completed one extra exploration. Thirty-four (34) of the 45 available community sites were used. The distribution of placements was as follows:

Placements	Sites
1	24
2	8
3	2

The great majority of sites (24) had only one student. Two sites, Vestal Elementary School and San Antonio Parks and Recreation, had three students each.

HISD students typically completed their Learning Level Projects (one per student) in the Personal/Social Development area on career-related topics. Sixteen (16) different community sites were used in connection with these projects; four were used by two students. Combining exploration and learning level placements, only 13 HISD community sites remained unused during the first year.

SAISD student Learning Level Projects were also classified in the Personal/Social Development category. Each student completed a project using one of nine community sites. Four sites, Lutheran General Hospital, KLRN-TV, Ella Austin Community Center and Xerox, had three or four placements. Combining exploration and learning level, 18 SAISD sites received no students during this term's implementation.

For Life Skills Projects SAISD students utilized prestructured packages in Creative Development and Critical Thinking prepared by NWREL. The projects incorporated community site experiences and required student products. All students completed this requirement.

HISD students were given a Functional Citizenship project in American Government. This included lectures, discussions, individual research, and written products. The second Life Skills Project was open to choice. Most students selected the Critical Thinking or Creative Development area and used the preprepared project packages. All students completed two projects.

The HISD staff selected eight of the NWREL Functional Competencies as being the most meaningful for their students. Each student chose at least five of the eight for completion this year; three completed six; and three completed seven. Most students selected Credit, Checking Account, Budget, and Job Application, with smaller concentrations of students in Insurance, Taxes, Health and Leisure, and Automobile Maintenance. Students used NWREL materials as resources for completing the competencies. Staff members served as competency certifiers in lieu of community persons.

The SAISD staff selected five Functional Competencies which all students completed as a group. For Checking Accounts and Credit a representative of the Texas State Bank explained standard procedures and left account materials for students. The students completed applications and account records which were certified by bank personnel. Texas Employment Commission personnel counseled students on how to fill out Job Applications. Students then completed real application procedures and had them certified at the Employment Commission. Students studied a first aid book to learn about handling Emergencies. Red Cross personnel then tested and certified them. For Budgets the NWREL materials were used and staff certified resulting competencies. All students completed these competencies, using the NWREL competency manual as a resource.

Career Seminars were not implemented by SAISD. Two seminars were conducted by HISD. In the first a Physical Therapist discussed careers, preparation requirements, and programs. The second was conducted by the San Antonio Chamber of Commerce on the free enterprise system. This included a film, speakers, and small group sessions about career planning.

Both HISD and SAISD required students to complete Student Journals. Most students complied with the request to make entries about their progress in the program on a weekly basis. Entries were submitted to project staff, who reacted in writing to the students.

A final program requirement cuts across the various activities. It calls for students to spend about half of their time, or 15 hours, per week on community sites. Project records were analyzed to determine the actual time spent on experience sites. Calculations were taken from a point after the first month of operations. In terms of average hours per week SAISD students ranged from 12.00 to 16.63, with an overall average of 14.05. HISD students ranged from 6.63 to 20.00, with an overall average of 13.96. The field hours requirement thus was not met by all students. The overall averages were close to the standard, but several student rates were far below the planned level.

Participant-perceived effects questionnaires were administered to program students, their parents, and community site representatives near the end of the year. These instruments seek to determine participant assessments of various program elements, the effectiveness of the EBCE program compared with regular school programs, and the effects of participation in the program.

The questionnaire items appear in Appendix B and the results are presented in Tables 6, 7, and 8.

As can be seen, the results from all three participant groups indicate a very favorable attitude toward the program. The response scales went from 1 = negative attitude to 5 = positive attitude. Most item means exceeded 4.00, demonstrating strong positive assessments of the program. The student and parent responses suggested that feedback about performance and program coordination were the weakest areas. Enjoyment of the program and superior opportunities for learning about occupations were seen as especially strong aspects. Community site respondents saw program coordination and counseling as the least commendable and career planning and experiential learning as the best aspects.

Avoidance of Sex-Role Stereotyping

This program element is an important feature which is built into many of the program activities. The avoidance of sex-role stereotyping is particularly crucial in a program representing the economic community, one of the most effective contexts for reducing stereotyping.

The project proposal calls for the creation of an external advisory group to suggest and review procedures relating to several program aspects. Staff training should involve sessions to enhance awareness of the problem and provide ways of avoiding sex-role stereotyping in project conduct. Learning resources should be selected and prepared with stereotype-free content as a goal. Counseling and guidance applied to the creation of student learning plans is another point where stereotype avoidance can

Table 6

STUDENT OPINION SURVEY

Question	SAISD		HISD		Total	
	#	$\overline{X}$	#	$\overline{X}$	#	$\overline{X}$
1	19	4.42	20	4.75	39	4.60
2	19	3.53	20	4.15	39	3.85
3	19	4.16	20	4.65	39	4.41
4	19	4.11	20	4.55	39	4.33
5	19	3.74	20	4.65	39	4.21
6	19	3.84	20	4.65	39	4.26
7	19	4.11	20	4.25	39	4.18
8	19	4.26	20	4.55	39	4.41
9	19	3.79	20	4.55	39	4.18
10	19	4.00	20	4.10	39	4.05
11	19	3.90	20	4.50	39	4.21
12	19	4.37	20	4.50	39	4.44
13	20	3.75	20	3.05	40	3.40
14	20	4.10	20	4.10	40	4.10
15	20	4.55	20	4.25	40	4.40
16	20	4.05	20	3.90	40	3.98
17	20	4.05	20	4.55	40	4.30
18	19	4.63	20	4.70	39	4.67
19	19	3.90	20	4.40	39	4.15
20	20	4.00	20	4.50	40	4.25
Total $\overline{X}$	19.3	4.06	20.0	4.36	39.3	4.22

Scales range from 1 = low to 5 = high. Item content may be found in Appendix B.

Table 7

PARENT OPINION SURVEY

Question	SAISD		HISD		Total	
	#	$\bar{X}$	#	$\bar{X}$	#	$\bar{X}$
1	20	4.50	20	4.65	40	4.58
2	20	3.85	20	3.50	40	3.68
3	19	4.37	20	4.50	39	4.44
4	20	4.20	20	4.35	40	4.28
5	20	4.15	20	4.45	40	4.30
6	20	4.05	19	3.16	39	3.62
7	20	4.15	19	4.00	39	4.08
8	20	4.50	20	4.00	40	4.25
9	20	4.50	20	3.95	40	4.23
10	20	4.50	20	4.25	40	4.38
11	20	4.50	20	4.40	40	4.45
12	20	4.25	20	4.40	40	4.33
13	20	4.40	20	4.45	40	4.43
Total $\bar{X}$	19.9	4.30	19.8	4.16	39.8	4.23

Scales range from 1 = low to 5 = high. Item content may be found in Appendix B.

Table 8

COMMUNITY PARTICIPANT OPINION SURVEY

Question	SAISD		HISD		Total	
	#	$\overline{X}$	#	$\overline{X}$	#	$\overline{X}$
1	20	4.45	21	4.48	41	4.46
2	20	4.70	21	4.62	41	4.66
3	20	4.35	21	4.43	41	4.39
4	20	4.45	21	4.62	41	4.54
5	20	4.25	21	4.14	41	4.20
6	20	4.60	21	4.43	41	4.51
7	19	4.05	21	4.14	40	4.10
8	20	3.90	20	3.90	40	3.90
9	20	4.10	21	4.19	41	4.15
10	19	3.79	21	3.86	40	3.83
11	20	4.25	21	3.90	41	4.07
12	20	4.25	21	4.67	41	4.46
13	19	4.05	21	4.14	40	4.10
14	20	4.10	21	4.33	41	4.22
Total $\overline{X}$	19.79	4.24	20.93	4.28	40.71	4.26

Scales range from 1 = low to 5 = high. Item content may be found in Appendix B.

have maximum effect. Finally, student placement in particular learning activities and the experiences provided by those activities need to be reviewed to assure that the reinforcement of stereotypes is not occurring.

An external review committee has been proposed for each participating school district. In the HISD five persons, one male and four females, have been nominated. They represent community enterprise, the PTA, the school board, school counselors, and school cafeteria staff. In the SAISD seven persons, four males and three females, have been nominated. They represent parents, community workers, the PTA, school counselors, the school board, and an employment agency. Since these committees did not become operational in time to serve the initial implementation, the evaluator reviewed program aspects related to sex-role stereotyping.

The staff training sessions presented by NWREL consultants addressed the avoidance of sex-role stereotyping. Interviews with the project staff indicated that they had developed an awareness of associated problems and were acting appropriately to avoid stereotypes in the program.

Learning center and community site resources were reviewed. No suggestion of stereotyping was found in selection, preparation, or student placement. There was some evidence that non-traditional career roles were presented, as females pursued law and disk jockey careers and males prepared for nursing and elementary teaching.

It thus appeared that staff were aware of the problems created by sex-role stereotyping and attempted to deal with them in counseling and other program elements. The initiation of advisory committees in the two districts remains a high priority task for next year.

III. OUTCOME EVALUATION

This component of the evaluation was organized to measure student effects attributable to participation in the EBCE program. The categories of outcome objectives of interest include student development in career skills, basic academic skills and life skills. This section describes the outcome evaluation procedures and presents the first year results.

Objectives

The EBCE program model includes a large number of intended benefits for participating students, the schools, the economic sector, and the community at large. The present evaluation design considered only student variables, which were selected for study based on their representativeness of program value and their measurability in a precise behavioral way. Using these qualifications not all variables of interest could be included. The focus was on those areas which are both meaningful to the model and amenable to objective assessment.

The areas of student outcomes selected were as follows:

1. Career Skills
    - Career Knowledge
    - Identifying Interests
    - Understanding Work
2. Basic Academic Skills
    - Reading
    - Writing
    - Mathematics

3. Life Skills

Attitudes Toward Learning
Acceptance of Self
Acceptance of Others

The outcome evaluation was designed to determine to what extent the EBCE program effected desired student outcomes in the above areas.

Procedures

The outcome evaluation design is discussed in terms of student samples, treatments, hypotheses, instruments, and analysis plan. Each of these design elements is treated separately.

Student samples. As described in the Process Evaluation section above, approximately 20 experimental and 20 control students were drawn in a stratified random fashion from the applicants for the HISD and SAISD projects. All applicants were twelfth grade students.

The HISD sample was stratified by sending school and sex to obtain equal proportion of each subgroup. Table 9 summarizes the HISD sample characteristics.

Table 9

HISD Student Group Composition

Group Characteristic	Experimental	Control
Sending School		
1. McCollum	10	11
2. Harlandale	10	12
Sex		
1. Female	10	11
2. Male	10	12
Ethicity		
1. Mexican-American	14	17
2. Anglo	6	6
3. Black	0	0
Sample Size	20	23

The SAISD sample was stratified only by sending school to assure representation of each of the district's high schools. One applicant was selected randomly from each school, then the remaining places were filled on a proportional basis according to how many students applied from each school. Table 10 presents characteristics of the SAISD sample.

Table 10

SAISD Student Group Composition

Group / Characteristic	Experimental	Control
Sending School		
1. Lanier	4	2
2. Wheatley	1	1
3. Fox Tech	1	1
4. Jefferson	2	2
5. Houston	3	5
6. Edison	4	4
7. Burbank	3	5
8. Highlands	2	3
Sex		
1. Male	10	8
2. Female	10	15
Ethnicity		
1. Mexican-American	14	16
2. Anglo	3	2
3. Black	3	5
Sample Size	20	23

In order to gather additional information on the student groups the RBS Student Demographic Data Questionnaire was administered. This instrument collects identifying information for the project and evaluation records. It also asks students to indicate their post secondary plans. Summary data are presented in Tables 11, 12, and 13.

Table 11

Student Post Secondary Plans in Percents

Group / Category	SAISD		HISD	
	Experimental	Control	Experimental	Control
1. Full time employment	25	15	30	26
2. Apprentice or on-the-job training	10	5	5	0
3. Military service or academy	5	0	5	0
4. Homemaker	0	0	0	0
5. Vocational, technical, trade or business school	5	5	5	15
6. Academic subjects at 2 year college	10	10	10	17
7. Vocational or technical subjects at 2 year college	10	10	5	17
8. Four year college or university	30	55	35	22
9. Part-time employment	5	0	5	0
10. Other	0	0	0	4

Table 12

Immediate Student Occupational Plans in Percents

Group / Category	SAISD		HISD	
	Experimental	Control	Experimental	Control
1. Higher Executives	10	5	0	4
2. Business Managers	25	55	16	39
3. Administrative Personnel	5	0	21	4
4. Clerical, Sales, Technicians	30	15	26	30
5. Skilled Labor	10	15	11	22
6. Semi-Skilled Labor	0	0	16	0
7. Unskilled Labor	5	0	0	0
8. Homemaker	0	0	0	0
9. Unemployed	0	0	0	0
10. Other	15	10	11	0

Table 13

Five-Year Student Occupational Plans in Percents

Group / Category	SAISD		HISD	
	Experimental	Control	Experimental	Control
1. Higher Executives	30	10	21	9
2. Business Managers	20	45	32	39
3. Administrative Personnel	15	5	21	4
4. Clerical, Sales, Technicians	25	20	11	17
5. Skilled Labor	10	10	5	26
6. Semi-Skilled Labor	0	0	5	0
7. Unskilled Labor	0	0	0	0
8. Homemaker	0	0	0	0
9. Unemployed	0	0	0	4
10. Other	0	10	5	0

These results indicate that the majority of students in all groups intended to either go to a four-year college or get a full-time job after high school. Immediate occupational plans after educational programs were primarily in the Business Manager, Clerical/Sales/Technician, and Skilled Labor categories. Student occupational plans for five years later added Higher Executives as a major category.

Treatments. Students selected for the experimental groups participated in the EBCE program. Each school district, HISD and SAISD, had a learning center. Each district also recruited their own pool of community sites. Program students participated in activities as described in the Process Evaluation section. Students selected for the control groups continued in their regular school programs. All students were administered the pretest-posttest instrument package.

Hypotheses. The hypotheses selected for study were derived from the student outcomes expected from the program. These hypotheses fall into three areas of program emphasis: career skills, basic academic skills, and life skills. Goals or objectives which could not be adequately measured have not been included in the hypotheses, but should be considered outside of the experimental context. Areas measurable only among experimental groups have likewise been excluded because observed outcomes could not be reliably attributed to program participation. The outcomes posited for evaluation purposes were as follows:

1. Career Skills
    a. Experimental students will acquire significantly greater career knowledge than control students.
    b. Experimental students will acquire significantly greater employability than control students.
    c. Experimental students will acquire significantly greater abilities in identifying interests than control students.
    d. Experimental students will acquire significantly greater understanding of work than control students.
2. Basic Academic Skills
    a. Experimental students will acquire reading skills equal to those acquired by control students.
    b. Experimental students will acquire writing skills equal to those acquired by control students.
    c. Experimental students will acquire mathematics skills equal to those acquired by control students.
3. Life Skills
    a. Experimental students will acquire significantly more positive attitudes toward learning than control students.
    b. Experimental students will develop significantly more acceptance of self than control students.
    c. Experimental students will develop significantly more acceptance of others than control students.

All hypotheses called for a comparative analysis of experimental vs. control group performance. Basic skills hypotheses asserted equity among groups, since the program is designed to maintain development in this area. Other hypotheses asserted experimental superiority, since the program is intended to accelerate growth in career and life skills.

Instruments. An instrument package was composed consisting of the following measures:

1. Student Attitude Survey (SAS)

   The SAS was designed to measure secondary school students' attitudes toward school, work, self and others. The 80-item instrument is presented on a two-sided optical scanning form. It contains four separate sections including the various subscales described below.

   - Assessment of Student Attitudes Toward Learning Environments
     - education in general
     - school counseling
     - school curriculum
     - school resources
     - overall learning environments
   - Career Attitude Survey
     - career knowledge
     - career planning
   - Acceptance of Self Scale
   - Acceptance of Others Scale

   All items are presented in a five-point Likert format with "Strongly Disagree" and "Strongly Agree" as poles.

2. Assessment of Career Development (ACD)

   This instrument was developed by the American College Testing Program. It focuses on three core components of career development: occupational awareness including occupational knowledge and exploratory occupational experiences; self awareness including job values and preferences, career plans, self-evaluation of career planning, and perceived needs for help with career planning; and career planning and decision-making including career planning knowledge and involvement in career planning experiences. The major purpose of the ACD is to provide counselors, administrators and evaluators with information to develop guidance programs and to assess the outcomes of career guidance programs.

The instrument is presented in booklet format with separate optical-scanning answer sheets available. The mean reading grade level is 7.2; the test is recommended for grades 8 through 11. The ACD is arranged into six units (subtests), two covering career-related knowledge and four covering career-related activities. Provisions are made for including up to 19 locally constructed items. Unit 1, Job Knowledge and Unit 5, Career Planning Knowledge were used for assessing career education program effects. These two subtests measure students' knowledge of occupational characteristics, preparation requirements, and the career planning process. Item formats are varied.

3. Self-Directed Interest Inventory (SDII)

This instrument is an adaptation of the Self-Directed Search (SDS) developed by John Holland. The SDII is based on a theory of personality types and environmental models. The personal assessment and occupational classification systems use six major scales: Realistic, Investigative, Social, Conventional, Enterprising and Artistic. The SDII measures occupations considered, activities preferred, perceived competencies, occupations of interest and self-estimates of abilities. Primary differences between the SDII and the SDS are directions to students, format of presentation and availability of machine scoring. The SDII is used with permission of Consulting Psychologists Press.

Three kinds of materials are required: an assessment booklet, an optical scanning response sheet and a classification booklet. There are five sections in the assessment booklet: Occupations Considered, Activities (six scales of eleven items each), Competencies (six scales of eleven items each), Occupations (six scales of fourteen items each), and Self Estimates (two sets of six ratings). In the first section students are asked to list those occupations which they have considered in their career planning. The Activities scales estimate how students spend their time and what their involvements are. The Competency scales require students to evaluate their competencies in a series of activities. On the Occupations scales students indicate preferences toward various occupations. The Self Estimate scales are self ratings of students' talents and traits. All scales included in the SDII correspond to the six categories in Holland's career development theory. The instrument is presented in an eight-page (8 1/2 x 5 1/2) booklet. An occupational classification booklet, The Occupations Finder, arranges 465 occupational titles according to the six personality types. Each occupational subclass is arranged according to the educational level required by the occupation. Most occupations are cross-referenced to the Dictionary of Occupational Titles.

4. Comprehensive Tests of Basic Skills (CTBS)

The Comprehensive Tests of Basic Skills are a series of test batteries produced in four overlapping levels with alternate forms (Q and R, S and T). The batteries at each level contain tests in four basic skills content areas: Reading, Language, Arithmetic and Study Skills. Science and Social Studies tests have been added to Forms S and T. The CTBS measures student development in four process areas (following Bloom's classification schema): recognition and/or classification, translation, interpretation and analysis. Five subtests were chosen by the RBS evaluation staff for inclusion in the instrument package: Reading Comprehension, Arithmetic Concepts, Arithmetic Applications, Language Expression, and Language Mechanics. Forms Q and R of Level 4 were used for the posttest and pretest respectively.

All subtests are included in a booklet format. Separate answer sheets are available for the Reading and Arithmetic subtests. The tests are in multiple choice form with four response options.

The Reading Comprehension test contains 45 items which refer to reading passages presented in the form of articles, stories, letters, or poems. Items can be classified into the following process categories: paraphrasing ideas; identifying the main idea; perceiving relationships; drawing conclusions; making inferences; extending interpretation beyond stated information; and recognizing the author's intention.

The Arithmetic Concepts test contains 30 items based on the number system, measurement, algebra, geometry, statistics and logic. The items can be classified into the following process categories: recognition and/or application of concepts and techniques; conversion of concepts into other forms; comprehension of the interrelationships of numerical concepts; and the organization of facts in complex problems.

> The Arithmetic Application test contains 20 items with emphasis upon problem solving. The items address the following process categories: comprehension of problems; selection of appropriate methods of solution; organization of facts in complex problems; and solution of problems.
>
> The Language Mechanics test contains 25 items which measure punctuation and capitalization. The items measuring ability to punctuate are based on a letter and an article containing punctuation alternatives from which the correct one must be selected.
>
> The Language Expression test has 30 items which measure the correctness and effectiveness of expression. The items require students to select the best words or phrases among several alternatives based on correct usage, expression of tone and mood, and economy and clarity of expression.

All of the above instruments were used in the pretest package, which was administered to HISD and SAISD student groups during the week of February 21, 1977. The posttest package consisted of the SAS, ACD, and SDII; the CTBS was omitted due to the brief intertest interval and the consequently poor liklihood that reliable gains could be observed. The posttesting was completed during the weeks of May 2 and 9, 1977. All testing was conducted under standardized conditions by the project staff under the direction of the evaluator. Testing instructions appear in Appendix C. For further information about the instruments see the RBS Instrument Service Guide or other publisher manuals:

1. SAS - Research for Better Schools
2. ACD - Houghton Mifflin Co.
3. SDII - Research for Better Schools
4. CTBS - CTB/McGraw-Hill

Analyses. Each hypothesis was tested using scores from one or more of the instruments listed above. The correspondence of hypothesized variables to instrument scores was as follows:

1. Career Skills
   a. career knowledge - ACD Job Knowledge and SAS Career Attitude Survey
   b. employability - ACD Career Planning
   c. identifying interests - ACD Occupational Preparation
   d. understanding of work - SDII match between Primary Occupation Considered and Summary Code
2. Basic Academic Skills (Hypotheses not tested this year)
   a. reading skills - CTBS Reading Comprehension
   b. writing skills - CTBS Language Mechanics and Expression
   c. mathematics skills - CTBS Arithmetic Concepts and Applications
3. Life Skills
   a. attitudes toward learning - SAS Attitudes Toward Learning Environments
   b. acceptance of self - SAS Acceptance of Self
   c. acceptance of others - SAS Acceptance of Others

All instruments were administered using optical scanning answer sheets which were processed at RBS. Summary data on individuals and groups were returned to the school districts via computer-generated profiles. Variable scores were also retained on disk by RBS' data processing center. These variable scores served as the raw data for analyses of program outcomes.

Since true experimental groups were available, multivariate analyses of covariance were performed for the scores within each measurement instrument. Posttest scores were the criterion, pretest scores the covariate, and group membership the independent variable. The computer program used was the Statistical Analysis System package. An exception to this analysis paradigm was provided by the procedure for analyzing the SDII. Since this involved a dichotemous score, match or no match between freely chosen and measured "best career", chi squares between experimental and control groups were computed. The basic skills hypotheses were not tested since posttest CTBS data were not collected. The .10 level was used as the criterion for statistical significance.

Results

This section presents the results in a descriptive form for each instrument administered. Then, statistical analyses are applied to between group differences to test the hypotheses. The data completeness was fairly good with 100 percent of all student groups pretested, 100 percent of both experimental groups posttested, and 71 percent of the SAISD and 74 percent of the HISD control groups posttested.

The CTBS results appear in Table 14, only the pretest was administered. Most students were performing at the ninth to tenth grade equivalent level. The SAISD experimental group scores appeared to be higher than the control group scores.

Table 14

Comprehensive Tests of Basic Skills
Pretest Grade Equivalent Scores

Subtest \ Group	SAISD				HISD			
	Experimental		Control		Experimental		Control	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Reading Comprehension	10.62	3.20	9.79	3.03	9.57	2.51	9.15	3.08
Arithmetic Concepts	10.96	2.91	9.35	2.59	8.88	2.83	9.81	2.63
Arithmetic Applications	10.49	2.97	8.12	2.56	8.19	2.90	9.15	3.26
Language Mechanics	9.18	2.96	9.25	2.94	9.62	2.55	9.45	2.82
Language Expression	10.48	2.94	9.49	3.34	9.56	2.88	9.37	3.17

Tables 15 and 16 display the SAS results. These are given in raw scores on a scale from 1 - low to 5 - high. Table 17 summarizes the group changes over the program term. In each case tested the experimental groups gained over time; while in many cases the control groups declined.

Table 15

Student Attitude Survey Pretest Scores*

Group / Subtest	SAISD				HISD			
	Experimental		Control		Experimental		Control	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Learning Attitudes	3.60	.59	3.82	.67	3.11	.43	2.89	.56
Career Attitudes	3.70	.52	3.94	.35	3.95	.45	3.82	.43
Self Concept	3.60	.55	3.67	.53	3.76	.56	3.57	.73
Others Concept	3.71	.32	3.61	.53	3.61	.71	3.52	.54

Table 16

Student Attitude Survey Posttest Scores

Group / Subtest	SAISD				HISD			
	Experimental		Control		Experimental		Control	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Learning Attitudes	3.71	.51	3.70	.86	3.97	.63	3.04	.39
Career Attitudes	3.86	.41	3.96	.38	4.17	.49	3.68	.48
Self Concept	3.75	.44	3.78	.43	3.93	.69	3.38	.58
Others Concept	3.74	.38	3.43	.63	3.82	.72	3.39	.64

*On a scale from 1-low to 5-high.

Table 17

Student Attitude Survey
Pretest-Posttest Difference Scores

Group / Subtest	SAISD		HISD	
	Experimental	Control	Experimental	Control
Learning Attitudes	+.11	-.12	+.86	+.15
Career Attitudes	+.16	+.02	+.23	-.14
Self Concept	+.15	+.11	+.17	-.19
Others Concept	+.03	-.18	+.21	-.13

Tables 18 and 19 present the pretest and posttest ACD results in raw scores. Table 20 shows the gains and losses of the various groups over time. As can be seen, no substantial and consistent patterns emerged.

Table 18

Assessment of Career Development
Pretest Scores

Group / Subtest	SAISD				HISD			
	Experimental		Control		Experimental		Control	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Occupational* Characteristics	41.55	6.27	34.85	8.30	37.35	6.64	30.91	6.90
Occupational* Preparation	12.05	2.48	11.15	2.89	11.95	2.77	12.48	2.28
Career Planning	27.60	4.58	25.25	3.69	24.00	5.47	24.87	4.16

*Together comprise Job Knowledge.

Table 19

Assessment of Career Development Posttest Scores

Group / Subtest	SAISD				HISD			
	Experimental		Control		Experimental		Control	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Occupational* Characteristics	42.75	3.95	38.60	5.46	38.30	6.51	36.12	9.32
Occupational* Preparation	13.10	2.14	12.73	1.84	12.60	2.20	12.23	3.36
Career Planning	27.60	5.15	24.93	4.30	26.75	4.65	25.94	6.84

*Together comprise Job Knowledge.

Table 20

Assessment of Career Development Pretest-Posttest Difference Scores

Group / Subtest	SAISD		HISD	
	Experimental	Control	Experimental	Control
Occupational Characteristics	+1.20	+3.75	+ .95	-2.97
Occupational Preparation	+1.05	+1.58	+ .65	- .25
Career Planning	0.0	- .32	+2.75	+1.07

*Together comprise Job Knowledge.

Tables 21 and 22 present the results from the SDII. Occupation considered (free choice) and summary weights (overall scores) are reported. In each case the primary occupational category code is the subject of analysis. These tables suggest a diversity of expressed and measured interest with some concentration in the "Social" category.

Table 21

Self Directed Interest Inventory

Pretest Occupations in Percents

Group / Category	SAISD				HISD			
	Experimental		Control		Experimental		Control	
	Occupations Considered	Summary Weights	Occupations Considered	Summary Weights	Occupations Considered	Summary Weights	Occupations Considered	Summary Weights
Realistic	15	18	5	10	10	25	26	30
Investigative	15	20	25	10	20	10	13	4
Artistic	30	8	15	0	10	5	13	17
Social	15	30	5	68	35	45	22	35
Enterprising	15	13	0	5	5	5	9	0
Conventional	10	13	10	8	15	10	13	13

Table 22

Self Directed Interest Inventory

Posttest Occupations in Percents

Group / Category	SAISD				HISD			
	Experimental		Control		Experimental		Control	
	Occupations Considered	Summary Weights	Occupations Considered	Summary Weights	Occupations Considered	Summary Weights	Occupations Considered	Summary Weights
Realistic	0	10	7	0	15	9	24	26
Investigative	15	18	27	10	20	13	24	0
Artistic	20	13	13	0	15	10	12	18
Social	15	38	20	53	30	44	24	35
Enterprising	10	10	7	0	0	13	0	3
Conventional	10	13	7	37	20	12	18	18

In Table 23 the matches by individual student between primary free choice and summary weight codes are displayed. In SAISD the trend was for experimentals to increase in matches over time while the controls remained constant. In HISD both groups were higher than SAISD groups in matches at the pretest and declined by the posttest administration.

Overall these descriptive results do depict student group status, but they do not suggest consistent patterns of difference. The next task in the evaluation was to test the results with statistical tests of significance.

Table 23

Self Directed Interest Inventory

Free Choice and Measured Preference Matches*

Category / Group	Match	No Match	Total
SAISD - Pretest			
Experimental	4	12	16
Control	1	6	7
SAISD - Posttest			
Experimental	8	8	16
Control	1	6	7
HISD - Pretest			
Experimental	10	9	19
Control	10	6	16
HISD - Posttest			
Experimental	7	12	19
Control	4	12	16

*"Free Choice" occupational categorization of section one - occupational preference; Measured Preference is the overall summary code, first letter in both cases.

The statistical testing was organized around the hypotheses stated above, Hypothesized effects in career skills and life skills were tested; basic skills were omitted. The results of this testing are briefly summarized below by hypothesis.

Statistical tables documenting the reported results appear in Appendix D. Analysis of covariance tables present multivariate results for the subtests within instruments. In each case the posttest (POS) score is the tested with pretest scores (PRE) as the covariates. Each subtest yields an F value on the "GROUP" row under the "TYPE IV SS" column. The probability listed is two-tailed and should be halved for the present hypotheses. The Statistical Analysis System (SAS) computer package was used.

Hypothesis 1: Experimental students will acquire significantly greater career knowledge than control students. This hypothesis was tested in both schools using the ACD Job Knowledge subtest and the SAS Career Attitude subtest. Minimal support was given by the analyses of covariance; HISD experimentals significantly outperformed controls on one ACD subtest.

Hypothesis 2: Experimental students will acquire significantly greater employability than control students. The ACD Career Planning subtest was used in this analysis. No support was found for the hypothesis.

Hypothesis 3: Experimental students will acquire greater abilities in identifying interests than control students. This was tested using the ACD Occupational Preparation subtest. No support was suggested by the results.

Hypothesis 4: Experimental students will acquire significantly greater understanding of work than control students. This hypothesis employed a measure of congruency between the SDII Primary Occupation Considered and the Summary Code. Chi square analyses of matches and non matches in the various groups were computed. No significant differences were found. This test was hindered by many missing values in the Primary Occupation Considered data.

Hypothesis 5: Experimental students will acquire significantly more positive attitudes toward learning than control students. This hypothesis was tested using the SAS Attitude Toward Learning Environments subtest. The hypothesis was fully supported with both SAISD and HISD program students significantly outperforming their control counterparts.

Hypothesis 6: Experimental students will develop significantly more acceptance of self than control students. The SAS Acceptance of Self subtest was used in this analysis. The hypothesis was partially supported, with the HISD students outdistancing the controls.

Hypothesis 7: Experimental students will develop significantly more acceptance of others than control students. The SAS Acceptance of Others subtest scores served as the basis for testing this final hypothesis.

The hypothesis of program effect was fully supported, with both program groups outperforming the control groups.

These results suggested minimal differential program effects in career skills and strong program impacts in life skills. The short treatment period and measurement limitations should be considered in interpreting these results.

IV. PROGRAM REQUIREMENTS

This section presents the program requirements for the San Antonio EBCE implementation and briefly describes how each was met. The requirements are drawn from the San Antonio program plan (Reprinted October 14, 1976) and the USOE specifications (Federal Register, Vol. 40, No. 220, p. 52962-52965). Most of the commentary summarizes information presented in other sections of this report. This section is intended to concisely depict the degree to which formal program objectives have been met.

Program Plan

The program plan lists four major project objectives for the first year demonstration.

Install and ready for operation the NWREL EBCE package in selected sites. It may be concluded from the process evaluation that this objective was met. The NWREL model and associated materials were installed in the two project sites.

Operate the program for one quarter, providing forty students with EBCE benefits as specified under the Project Approach. Again, the process evaluation demonstrated that this objective was well met. Forty students, twenty from each of two districts, participated in the program for one quarter. All students completed the implemented program requirements and activities, thus experiencing the intended benefits.[1]

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[1] Only one model element, Employer Seminars, was not implemented by one district. This omission is minor and will be corrected.

Establish ancillary relationships and operationalize third party evaluation. This was accomplished with Research for Better Schools serving as the third party evaluator. RBS has experience in career education program development and evaluation.

Plan details of dissemination/demonstration plan. This objective area remains somewhat behind schedule. The dissemination plan and activities have been initiated on a general scale. Subsequent levels of planning have yet to be completed.

USOE Specifications

The Federal Register indicates three "significant elements" for EBCE demonstration projects and three "required program features." Each of these is described below.

It represents a comprehensive alternative to regular high school, offering courses which either fulfill or supplement all requirements for graduation. The San Antonio program admitted only seniors during the first year, thus serving to supplement graduation requirements. The Texas Education Agency approved the granting of credit, which was awarded for one quarter in the program. In addition to offering opportunities in career, basic, and life skills, the program allows students to take courses in their sending schools and other area educational institutions. All "courses" and experiences are undertaken within an individualized learning plan for each student. The program thus provides comprehensive opportunities through an alternative school structure.

It is experientially oriented in that students are permitted to perform non-paid work tasks as well as to observe adults in their work environment. It entails the opportunity for exposure to more than one community site, and requires learning more than one type of work-related skill. The activities in the work place are organized to yield academic, career, and interpersonal skills, as well as occupational skills. The process evaluation demonstrated that the program was experientially oriented, with students spending more than ten hours a week at community sites. Each student visited at least six sites representing varying careers. All student experience was on a non-paid basis. The activities in the work place tended to promote a variety of skills (non-occupational); more organization of the site activities will help to maximize the acquisition of these skills.

It possesses an organizational structure made up of school and community representatives whose sole purpose is to render advisory, policy making, or operational assistance to the program. In planning the San Antonio program awareness building presentations were made to PTA groups, civic clubs, school assemblies, and church groups. School staff members were also invited to the initial training session conducted by NWREL. There has thus been a sharing of information with school and community representatives. Based on these initial experiences, on March 16, 1977, the Executive Director of ESC-20 specified twelve persons to compose an advisory committee for the San Antonio EBCE project. The members represent educational and community interests. Due to the brief period of program implementation, the committee has not yet had an operational impact.

A systematic plan [is required] to eliminate existing sex bias and sex-role stereotyping and to avoid introducing these elements into the activities undertaken with respect to the demonstration project. The plan proposed included the creation of advisory committees in each school district to review activities related to the avoidance of sex-role stereotyping. The activities included staff training, learning resources acquisition, student placement, and student counseling. The committees were proposed but not activated in time to serve this year. The evaluator thus conducted the planned reviews and found project activities in compliance with the intent to avoid sex-role stereotyping.

A third party objective evaluation [is required] the design of which should attempt to measure student outcomes against stated objectives of the project as well as gather such process and treatment information as will show reason why the project was or was not successful in achieving the desired outcomes for the designated population of student participants. RBS designed and implemented a comprehensive process and outcome evaluation which successfully met this requirement.

A strong emphasis on sex-fair guidance, counseling, placement, and follow-up services [is required]. Project staff were given advice and suggestions in these regards by the NWREL trainer and the RBS evaluator. The project appears to meet the objective but could be strengthened by a formal plan for these sex-fair services.

V. SUMMARY AND CONCLUSIONS

The San Antonio Experience Based (EBCE) Program is a three-year, federally-sponsored implementation of the Northwest Regional Education Laboratory (NWREL) EBCE model. This program is designed to assist youth in making a successful transition to adulthood through community-based and learning center experiences. The San Antonio project was developed by the Education Services Center - Region 20 (ESC-20) and implemented by the Harlandale Independent School District (HISD) and the San Antonio Independent School District (SAISD). The funding guidelines called for an objective, third-party evaluation. A comprehensive process and outcome evaluation was conducted by Research for Better Schools (RBS) of Philadelphia. The present report describes the evaluation activities and first year results.

The evaluation consisted of both process and outcome components. Process evaluation received the primary emphasis during the first program term (February-May, 1977). Two interim process evaluation reports were submitted to highlight program progress and concerns. Outcome evaluation will be accorded greater emphasis in subsequent years.

Process Evaluation

The process component of the evaluation was designed to provide information on each of the major elements necessary for successful implementation of the EBCE program. These elements have been categorized as follows:

1. Selection and preparation of staff
2. Preparation of learning resources
3. Selection of students
4. Preparation of learning plans
5. Implementation of learning activities
6. Avoidance of sex-role stereotyping

Implementation standards in each area were developed by the evaluator based on the project proposal and the NWREL model.

A major function of the process evaluation was to provide feedback and recommendations to the project staff regarding the essential program elements. The process evaluation was also intended to document the extent to which the intended program was actually implemented.

Information pertinent to evaluating the program elements was obtained during the three site visits made by the evaluator to the San Antonio project. The implementation of each element was directly observed. Each staff member was interviewed several times. All project files and records were reviewed by the evaluator during the course of each site visit.

Project staff were selected through the usual procedures employed by the participating school districts. Each district selected a project manager, guidance counselor, and learning manager. Staff were trained in special sessions by personnel from the NWREL. The selection and preparation procedures appeared to result in a staff adequate for implementing the program.

Learning resources consisted of those in the learning center and those provided at community sites. Each district established a learning center in one of the district's school buildings. One of these centers had inadequate space and should be improved for next year. Both schools began to acquire learning materials for the centers, but much development remains necessary in this area. Community sites were recruited in abundance, with 41 for SAISD and 45 for HISD. Some needs were noted in preparing the sites for work with students.

Students were selected in both districts using a stratified random procedure for program and control groups. Many more students applied for the SAISD program than was true for HISD, but both districts were able to meet the need for 20 program and 20 control students.

In both districts the project staff members shared responsibility for developing students' learning plans. The planning task was more centralized with the learning manager at SAISD, while each HISD staff member had charge of a group of students. All learning plans were carefully developed with knowledge and awareness of each student's needs and interests.

The implementation of learning activities proceeded successfully with all students completing the major project requirements:

4	Awareness Visits
2	Exploration
1	Learning Level Project
2	Life Skills Projects
5	Functional Competencies

Most requirements involved the use of community sites as well as learning center staff and resources. Given the brief time period available to plan and implement the program (January 3, 1977-May 20, 1977), this activity completeness represents a substantial accomplishment.

Participant-perceived effects questionnaires were administered to all program students, their parents, and community site representatives. The results were strongly supportive of the program, indicating that the program is perceived very favorably by participants and considered to be a valuable addition to the educational system.

The avoidance of sex-role stereotyping was an important aspect in the program plan relevant to staff training, community site development, student placement, and personal counseling. An external advisory committee was planned in each district to review project activities as they relate to the avoidance of sex role stereotyping. These committees were composed but not operationalized. The evaluator served as a reviewer in their stead and found the program in compliance with stated intentions. Developing these committees as active groups remains a priority for next year.

Outcome Evaluation

This component of the evaluation was organized to measure student effects attributable to participation in the EBCE program. The categories of outcome objectives included student development in career skills, basic academic skills and life skills. The EBCE program model includes a large number of intended benefits for participating students, the schools, the economic sector, and the community at large. The present evaluation design considered only student variables, which were selected for study based on their representativeness of program value and their measurability in a precise behavioral way. Using these qualifications, not all variables of interest could be included. The focus was on those areas which were both meaningful to the model and amenable to objective assessment.

The areas of student outcomes selected were as follows:

1. Career Skills
    - Career Knowledge
    - Identifying Interests
    - Understanding Work
2. Basic Academic Skills
    - Reading
    - Writing
    - Mathematics
3. Life Skills
    - Attitudes Toward Learning
    - Acceptance of Self
    - Acceptance of Others

The outcome evaluation was designed to determine to what extent the EBCE program effected desired student outcomes in the above areas.

The outcome evaluation design was a true experimental one with 20 twelfth grade experimental students in each of the SAISD and HISD programs. Another 20 students in each district participated in the regular twelfth grade curriculum and served as control groups.

Hypotheses were formulated in the student outcome areas above. Each hypothesis posited experimental group performance superior to the control groups'. Instruments were selected to measure hypothesized variables.

The instrument package included the Comprehensive Tests of Basic Skills, the Assessment of Career Development, the Student Attitude Survey and the Self-Directed Interest Inventory. Instruments were administered in a pretest-posttest pattern, except for the CTBS which was a pretest only.

The multivariate analysis of covariance was the principal analysis used. Within instruments, the posttest score was used as the criterion with pretest scores as covariates. Between group differences dependent on group membership were tested. Chi square analyses were used to test the congruence between freely chosen occupations and occupations of measured "best fit" as measured by the Self-Directed Interest Inventory.

The results gave marginal support for program effectiveness in career skills and strong support for impact in life skills. Basic skills were not tested due to the brief period of program implementation.

Conclusions

The ESC-20, HISD, and SAISD staff did a commendable job in planning and implementing the San Antonio EBCE Program. This program model requires the recruitment of a large number of community sites, the retraining of staff for new roles, the recruitment and orientation of students, and the implementation of a complex program model. The model was implemented well. The learning and counseling staff members displayed a competence and developing sophistication in the performance of their roles. Students met the specific activity requirements of the model. This first year represents an excellent initial implementation of EBCE.

The outcome evaluation demonstrated very strong comparative effects in attitudes toward school, self acceptance, and others acceptance. These important life skills were positively affected by participation in the program. The career skills results showed no consistent patterns of difference between the program and control students. This finding must be interpreted with cognizance that the program was of very limited duration and involved small numbers of students. The time for growth was constrained and the potential for significance lowered by the small samples. Next year will provide a better test of the outcome hypotheses.

The project was also reviewed in terms of its proposed objectives and the relevant federal requirements. The project was found to be in compliance with stated objectives and regulations, meeting both the letter and intent.

VI. RECOMMENDATIONS

A series of recommendations has been formulated to assist in refinement of the program for future years. To a large extent these suggestions have been presented in interim process evaluation reports.

Improve HISD Learning Center

The single elementary school classroom which has been allocated for the HISD learning center is not adequate for the 20 students and 4 staff members involved in the program. Student counseling, telephone contacts, individual study, program planning, and project administration are diverse and mutually interfering activities which all suffer under the present conditions. Sufficient space and facilities to allow discrete activity centers should be sought.

Develop Learning Center Resources

Although many of the career and academic skills needed by students can be supplied through community sites, substantial and accessible materials will be needed in the learning centers to support vicarious exploration and to fulfill diagnosed needs. The project is responsible for providing comprehensive educational opportunities, and the resources to meet this challenge must be assured. Both districts have initiated some development, but a more concentrated effort will be necessary, especially as younger students are enrolled.

Activate the Committees for the Avoidance of Sex-Role Stereotyping

These committees have been initiated, but no formal activities have been undertaken. This remains a project priority. The committees will perform an important service for the program and a safeguard for its participants.

Coordinate the Use of Community Sites Serving Both School Districts

Several community sites have been recruited and utilized by both HISD and SAISD. Since the school districts exist in close proximity, this is a natural occurrence. It does, however, hold some problematic potentials. Different persons within the site may agree to participate with the two districts while being unaware of the other's commitment. This could create embarrassing situations, confusion about the program, or conflicts within the site organization. Also, the districts may be prompted to compete over the use of certain sites. While competition at a general performance level may be healthy, contention over a specific site can have only negative effects. Procedures must be designed to avoid these harmful potentials. This will require a coordination between the districts regarding site recruitment. Once one district has initiated contact with a site, then any involvement of the other district should be through the initiator.

Develop Procedures for Preparing Community Site Personnel

Several operational problems involving the community sites have occurred. Also, it is apparent that differing views on the program goals and procedures are held. An orientation packet should be prepared to facilitate an understanding of the program in a written form. Verbal presentation to prospective participants should also be standardized so that consistent and complete information is given. If possible, group sessions should be arranged with community site personnel to foster communication.

Review the Site Analysis Procedures

The present site analysis forms are cumbersome and possibly not necessary in full form for all sites. The exact data needs for student program planning should be assessed. Then, the most efficient site analysis procedures can be ascertained. Some exploration is probably warranted here.

Maintain Communication with Sites which are Recruited but not Used

Both SAISD and HISD list many sites as recruited but unused by students. This is a desirable condition for the program, but it raises a potential problem. Sites may be "put off" by having given a commitment which then is not exercised. One procedure which may be helpful in preventing this is a periodic newsletter or other communication about the project to all community sites. Another possibility would be occasional group sessions.

Select More Alternates for the Student Groups Next Year

Dropouts from the SAISD program this year resulted in the transfer of students from the control group. While this procedure has practical merit, it detracts from the evaluation effort. A larger complement of program alternates should be selected in the future to avoid this problem. Students should also be required to take the evaluation test battery as part of the program application process. This drastically reduces later dropouts.

Review Staff Roles

In considering the job descriptions used to hire project staff, a minor concern was noted regarding the generality of the stated requirements for Project Manager. This had no immediate implications, since the positions were filled, but it prompted questions about staff roles. Discussions about this with the various staff members led to the conclusion that the two schools used different role definitions, and some problems in complete coverage of responsibility or level of efficiency might be encountered. Staff role structuring in practice should be centrally coordinated and the benefits of NWREL experience in this area should be applied.

Finally, several program aspects were noted as behind schedule. This includes the external advisory committee, the dissemination plan, and implementation of employer seminars. These minor problems should be corrected.

Appendix A

SITE VISIT SCHEDULES

SAN ANTONIO EXPERIENCE BASED CAREER EDUCATION DEMONSTRATION PROJECT

VISITATION SCHEDULE

DR. KEITH M. KERSHNER

MONDAY, FEBRUARY 21, 1977

8:00 - 8:30 a.m.	Enroute Education Service Center, Region 20
8:30 - 8:45 a.m.	Meet with Project Coordinator Dr. Maurice Hartle
8:45 - 9:00 a.m.	Meet with Learning Center Staffs Harlandale ISD Dr. William Marshall - Central Administration Mr. Raul Barrera - Project Manager Mrs. Sally Halstead - Counselor Mr. Robert Maddox - Learning Specialist San Antonio ISD Dr. William Robinson - Central Administration Mr. Glenn Porter - Central Administration Mr. Sebastian Sanchez - Project Manager Mrs. Edna Christopher - Counselor Miss Janel Lynn - Learning Specialist
9:00 - 10:00 a.m.	Outline third-party evaluation
10:00 - 11:30 a.m.	Review forms and monitoring procedures
11:30 - 12:00 noon	Orientation for test administrators
12:00 - 1:30 p.m.	Lunch
1:30 - 4:00 p.m.	Review staff selection and preparation Review student selection Review sex stereotyping activities Review San Antonio EBCE Demonstration Project Proposal

TUESDAY, FEBRUARY 22, 1977

8:00 - 8:30 a.m.	Enroute Education Service Center, Region 20
8:30 - 9:00 a.m.	Meet with project director
9:00 - 9:30 a.m.	Enroute Burbank High School
9:30 - 10:00 a.m.	Monitor testing of SAISD Control Group
10:00 - 10:30 a.m.	Enroute San Antonio Parks and Recreation Departmen
10:30 - 11:00 a.m.	Community Learning Site Visit (HISD) San Antonio Parks and Recreation Department 950 E. Hildebrand Contact: Don Maddox Jannette Bedford
11:00 - 11:30 a.m.	Enroute Education Service Center, Region 20
11:30 - 1:00 p.m.	Lunch
1:00 - 1:30 p.m.	Enroute Fort Sam Houston
1:30 - 2:30 p.m.	Community Learning Site Visit (SAISD) Dental Section, Academy of Health Science Fort Sam Houston Willis Hall, Room 3401 Stanley Road
2:30 - 3:00 p.m.	Enroute Tafolla Junior High School
3:00 - 5:00 p.m.	Tour San Antonio ISD Learning Center Review Records Develop specifications for needed formative systems
5:00 - 5:30 p.m.	Enroute Hilton Palacio del Rio

WEDNESDAY, FEBRUARY 23, 1977

8:00 - 8:30 a.m.	Enroute Rayburn Junior High School
8:30 - 9:00 a.m.	Monitor testing of Harlandale ISD Experimental Group
9:00 - 10:30 a.m.	Tour Harlandale ISD Learning Center
10:30 - 11:00 a.m.	Enroute Tafolla Junior High School

Wednesday, February 23, 1977 (continued)

11:00 - 11:30 a.m.	Monitor testing of San Antonio ISD Experimental Group
11:30 - 12:00 noon	Enroute Education Service Center, Region 20
12:00 - 1:00 p.m.	Lunch
	Present suggestions for systems changes
	Outline future schedule
	Disucss teacher corps potential
1:00	Enroute San Antonio International Airport

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1/21/77

SAN ANTONIO EXPERIENCE BASED CAREER EDUCATION DEMONSTRATION PROJECT

VISITATION SCHEDULE

DR. KEITH M. KERSHNER

MONDAY, APRIL 18, 1977

9:00 - 9:15 a.m.	Enroute Education Service Center, Region
9:15 - 11:15 a.m.	Meet with Project Director Review visitation schedule Finalize activities
11:30 - 12:00	Enroute City Hall, Military Plaza
12:00 - 1:00 p.m.	Observe and interview student at community learning site (Harlandale ISD) Site: Purchasing Department Contact: Mr. Archie Tietzman Student: Peggy Goodwyn
1:00 - 1:15 p.m.	Enroute Luthern General Hospital 701 South Zarzamora
1:15 - 2:15 p.m.	Observe and interview student at community learning site (Harlandale ISD) Site: Emergency Room Contact: Donna Covenay Student: Ishmael Valenzuela Site: X-Ray Department Contact: Terry Leal Student: Isabel Hernandez
2:15 - 2:30 p.m.	Enroute Fire Station #33 36th Street and Highway 90
2:30 - 3:30 p.m.	Observe and interview student at community learning site (Harlandale ISD) Site: Fire Station #33 Contact: Captain Bieller Student: Pete Garza
3:30 - 4:00 p.m.	Enroute Menger Hotel

TUESDAY, APRIL 19, 1977

8:45 - 9:00 a.m.	Enroute Lutheran General Hospital 701 South Zarzamora
9:00 - 10:15 a.m.	Observe and interview student at community learning site (San Antonio ISD) Site: Laboratory Contact: Mr. Doyle Siefried Student: Sherri Hovath
10:15 - 10:30 a.m.	Enroute KLRN-TV Institute of Texan Cultures
10:30 - 11:45 a.m.	Observe and interview student at community learning site (San Antonio ISD) Site: TV Contact: Mrs. Olsen Student: Marie Saenz
11:45 - 12:00 noon	Enroute Menger Hotel
12:00 - 12:45 p.m.	Lunch
12:45 - 1:00 p.m.	Enroute Hilton Palacio del Rio Hotel
1:00 - 2:15 p.m.	Observe and interview student at community learning site (San Antonio ISD) Site: Food, Beverage and Restaurant Management Contact: Mr. David Jones Student: Victor Fraga
2:15 - 3:00 p.m.	Enroute Education Service Center, Region 20
3:00 - 4:30 p.m.	Meet with Project Director Briefing - Site visits Review Field Evaluation Reports
4:30 - 5:00 p.m.	Enroute Menger Hotel

WEDNESDAY, APRIL 20, 1977

9:00 - 9:15 a.m.	Enroute San Antonio ISD Learning Center Taffolla Junior High School 1303 Durango

9:15 - 11:30 a.m.	Observe, interview staff, and review records
11:30 - 12:45 p.m.	Lunch
12:45 - 1:00 p.m.	Enroute Harlandale ISD Learning Center Rayburn Elementary School 635 Rayburn
1:00 - 3:15 p.m.	Observe, interview staff, and review records
3:15 - 4:00 p.m.	Enroute Menger Hotel

THURSDAY, APRIL 21, 1977

9:00 - 9:30 a.m.	Enroute Education Service Center, Region 20
9:30	Meet with Project Director

Planning session:

- Administration of student parent and community participant surveys
- Record systems
- Activities in avoidance of sex-role stereotyping
- Post-testing procedures
- Student selection for 1977-78
- Evaluation plans for 1977-78

BRL/lk

SAN ANTONIO EXPERIENCE BASED CAREER EDUCATION DEMONSTRATION PROJECT

VISITATION SCHEDULE

DR. KEITH M. KERSHNER

MONDAY, JUNE 6, 1977

9:00 - 9:15 a.m.	Enroute Education Service Center, Region 20
9:15 - 12:00 noon	Meet with Project Director . Review Visitation Schedule . Finalize Activities
12:00 - 1:00 p.m.	Lunch
1:00 - 1:30 p.m.	Enroute San Antonio Independent School Distric Learning Center (Tafolla Middle School)
1:30 - 4:00 p.m.	Learning Site Recruitment and Utilization . Review records . Abstract records Learning Center Resources and Uses Student Activities . Requirements . Plans . Completed student projects . Completed student journals . Tests Attendance Monitoring . Procedures and records
4:00 - 4:30 p.m.	Enroute Menger Hotel

TUESDAY, JUNE 7, 1977

9:00 - 9:15 a.m . . . . Enroute Harlandale Independent School District Learning Center
(Rayburn Elementary School)

9:15 - 12:00 noon . . . . Learning Site Recruitment and Utilization

- Review records
- Abstract records

Learning Center Resources and Uses

Student Activities

- Requirements
- Plans
- Completed student projects
- Completed student journals
- Tests

Attendance Monitoring

- Procedures and records

12:00 - 1:30 p.m. . . . . Lunch

1:30 - 2:00 p.m. . . . . Enroute Education Service Center, Region 20

2:00 - 4:00 p.m. . . . . Data Analysis (In house)

WEDNESDAY, JUNE 8, 1977

9:00 - 9:15 a.m. . . . . Enroute Harlandale Learning Center
(Rayburn Elementary School)

WEDNESDAY, JUNE 8, 1977 (continued)

9:15 - 12:00 noon . . . . Information Gathering

Staff Interviews

- Successes (Program)
- Problems (Program)
- Staff role structure
- Plans for next year

12:00 - 1:00 p.m. . . . . Lunch

1:00 - 1:30 p.m. . . . . Enroute San Antonio Independent School District Learning Center (Tafolla Middle School)

1:30 - 4:00 p.m. . . . . Learning Site Recruitment and Utilization

- Review records
- Abstract records

Learning Center Resources and Uses

Student Activities

- Requirements
- Plans
- Completed student projects
- Completed student journals
- Tests

Attendance Monitoring

- Procedures and records

4:00 - 4:30 p.m. . . . . Enroute Menger Hotel

THURSDAY, JUNE 9, 1977

9:00 - 9:15 a.m. . . . . Enroute Education Service Center, Region 20

9:15 - 12:00 noon . . . . Meet with Project Director

Review

- Preliminary findings
- Pre-test and post-test profiles

Planning for 1977-78

Debriefing

Appendix B

PARTICIPANT QUESTIONNAIRES

NAME: ______________________ DATE: ________________

Career Education Program

Student Opinion Survey

This survey is meant to give you an opportunity to express your opinions about the Career Education Program in which you have been participating. Most of the questions are to be answered on a scale of numbers from ① to ⑤. The words at the top and bottom of each set of questions tell you what the numbers mean. A ① may mean something like "Definitely No"; if you feel very strongly that the answer to the question is NO, then you should circle the ①. A ⑤ may mean "Definitely Yes"; if you feel very strongly that the answer is YES, then you should circle the ⑤. The numbers in-between (2, 3, 4) mean that your opinion is neither "Definitely No" nor "Definitely Yes", but somewhere between them. You should circle the number that is closest to your real opinion of what the question is asking about. Some scales have different words, but they always work the same. Read the words above and below the numbers so you know what the numbers mean. Read the questions carefully, and circle the number which is the closest to your opinion. There are no right or wrong answers; your thoughts and feelings are the important things in this survey. The answers students give will be used to help determine how well the program is doing now and to improve it in the future. Remember to circle a number to answer each item. If you have any questions while you're completing the survey, just ask for assistance.

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

		Definitely No				Definit Yes
1.	Have you liked attending the Career Education Program?	1	2	3	4	5
2.	Do you get enough feedback about how well you are doing in the program?	1	2	3	4	5
3.	Would you say the Career Education Program has helped you form career plans?	1	2	3	4	5
4.	Would you say you've learned a lot while attending the Career Education Program?	1	2	3	4	5
5.	If you had it to do over again, do you think you would decide to participate in the Career Education Program?	1	2	3	4	5
6.	Have the activities available in the Career Education Program been interesting to you?	1	2	3	4	5
7.	In the Career Education Program have you felt that you could progress at your own rate?	1	2	3	4	5
8.	Through your experiences in the Career Education Program have you learned a lot about opportunities for the future?	1	2	3	4	5
9.	Have you had enough choice in selecting the types of employer/resource sites you visit?	1	2	3	4	5
10.	In general, are employer/resource personnel involved in the Career Education Program aware of your needs and interests?	1	2	3	4	5
11.	In general, at employer/resource sites did you get to actually do things, rather than just listen?	1	2	3	4	5
12.	In general, have you felt welcome at the employer/resource sites?	1	2	3	4	5
		Definitely No				Defini Yes

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

	Poor				Excellent
13. How well organized and coordinated do you think the Career Education Program has been?	1	2	3	4	5
14. How would you rate the general quality of the Career Education Program staff?	1	2	3	4	5
15. How would you rate the personal counseling available in the Career Education Program?	1	2	3	4	5
16. How would you rate the overall quality of the Career Education Program activities?	1	2	3	4	5
17. How would you rate the general quality of the Career Education Program employer/ resources you've worked with?	1	2	3	4	5
	Poor				Excellent

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

	Much Less				Much More
18. In comparison with regular schools, how much opportunity did the Career Education Program provide you for learning about occupations?	1	2	3	4	5
19. In comparison with regular schools, how much opportunity did the Career Education Program provide you for general learning?	1	2	3	4	5
20. In comparison with past experiences in regular schools, how motivated are you to learn in the Career Education Program?	1	2	3	4	5
	Much Less				Much More

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

21. What positive changes have you noticed in yourself that might be a result of participation in the Career Education Program?

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22. What negative changes have you noticed in yourself that might be a result of participation in the Career Education Program?

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23. Please use the space below for any additional comments you may have on any aspect of the Career Education Program.

NAME: ______________________________ DATE: ______________________

Career Education Program

Parent Opinion Survey

This survey is meant to give you an opportunity to express your opinions about the Career Education Program in which your son or daughter has been participating. Most of the questions are to be answered on a scale of numbers from ① to ⑤. The phrases on either end of the scale indicate what the scale means. For instance, ①may be designated as "Definitely No"; if you feel strongly that the answer to the question is No, then you should circle the ①. A ⑤ may mean "Definitely Yes"; if you feel strongly that the answer is Yes, then you should circle the ⑤. The numbers in-between (2, 3, 4) indicate an opinion somewhere in-between "Definitely No" and "Definitely Yes". Different scales have different phrases, like "Poor-Excellent" or "Much Less-Much More", but they all work the same way.

Read each question then the scale below it. Circle the number which is closest to your opinion. There are no right or wrong answers; your thoughts and feelings are the important things in this survey. The answers parents give will help to determine how well the program is doing now and to improve it in the future. Remember to circle a number for each item. Thank you for taking the time to fill out this survey.

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

	Definitely No				Definitely Yes
1. Do you think your child has liked attending the Career Education Program?	1	2	3	4	5
2. Have your received enough information about your child's program in the Career Education Program?	1	2	3	4	5
3. Would you say the Career Education Program has helped your child form career plans?	1	2	3	4	5
4. Would you say that your child has learned a lot while attending the Career Education Program?	1	2	3	4	5
5. If you had it to do over again, would you want to have your child participate in the Career Education Program?	1	2	3	4	5
	Definitely No				Definitely Yes

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

	Poor				Excellent
6. How well organized and coordinated do you think the Career Education Program has been?	1	2	3	4	5
7. How would you rate the general quality of the Career Education Program staff?	1	2	3	4	5
8. How would you rate the personal counseling available in the Career Education Program?	1	2	3	4	5
9. How would you rate the overall quality of the Career Education Program activities?	1	2	3	4	5
10. How would you rate the general quality of the Career Education Program employer/resources you've worked with?	1	2	3	4	5
	Poor				Excellent

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

	Much Less				Much More
11. In comparison with regular schools, how much opportunity did the Career Education Program provide you for learning about occupations?	1	2	3	4	5
	1	2	3	4	5
12. In comparison with regular schools, how much opportunity did the Career Education Program provide you for general learning?	1	2	3	4	5
13. In comparison with past experiences in regular schools, how motivated are you to learn in the Career Education Program?	1	2	3	4	5
	Much Less				Much More

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

14. What positive changes have you noticed in your child that might be a result of participation in the Career Education Program?

15. What negative changes have you noticed in your child that might be a result of participation in the Career Education Program?

NAME: ______________________________ DATE: __________

ORGANIZATION: ______________________________

Career Education Program

Community Participant Opinion Survey

This survey gives you an opportunity to express your opinions about the Career Education Program in which you have been participating. Much of the program is built upon the interest and willingness demonstrated by persons like yourself to develop and operate experience-based learning activities for students. It is important for the Career Education staff and sponsors to have your impressions and suggestions. Such information can help to improve the program so that it can achieve its goals.

Most of the questions are to be answered on a scale of numbers from ① to ⑤. The words at the top and bottom of each set of questions indicate what the numbers mean. For instance, ① may mean "Definitely No"; if you feel strongly that the answer to the question is NO, then you should circle the ①. A ⑤ may mean "Definitely Yes"; if you feel strongly that the answer is YES, then you should circle the ⑤. The other numbers (②, ③ and ④) are for indicating opinions that fall between "Definitely No" and "Definitely Yes." Different sets of questions have different words at the top and bottom, such as "Poor-Excellent" or "Much Less-Much More," but they all operate in the same way. Read each question carefully and circle the number which is closest to your opinion.

We appreciate your interest and time in helping the Career Education Program.

RBS Inc. Form CPOS-2

USE THIS SCALE TO ANSWER QUESTIONS 1 - 7

Definitely No	No	Not Sure	Yes	Definitely Yes
1	2	3	4	5

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

1. Do you think students enjoy participating in the Career Education Program?	1	2	3	4	5
2. Would you say the Career Education Program helps students to form career plans?	1	2	3	4	5
3. Would you say that students learn a lot while attending the Career Education Program?	1	2	3	4	5
4. Do you think that students generally gain from their experiences in the Career Education Program?	1	2	3	4	5
5. On the whole, would you say that your organization gains by participation in the Career Education Program?	1	2	3	4	5
6. Would you recommend to other organizations or individuals that they become involved in a Career Education Program?	1	2	3	4	5
7. Does your organization plan to continue its involvement with the Career Education Program?	1	2	3	4	5

USE THIS SCALE TO ANSWER QUESTIONS 8 - 11

Poor	Fair	Not Sure	Good	Excellent
1	2	3	4	5

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

8. How well organized and coordinated do you think the Career Education Program has been?	1	2	3	4	5
9. How would you rate the general quality of the Career Education Program staff?	1	2	3	4	5
10. How would you rate the personal counseling available in the Career Education Program?	1	2	3	4	5
11. How would you rate the overall quality of the Career Education Program activities?	1	2	3	4	5

USE THIS SCALE TO ANSWER QUESTIONS 12 - 14

Much Less	Less	Not Sure	More	Much More
1	2	3	4	5

PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

12. In comparison with regular schools, how much opportunity does the Career Education Program provide students for learning about occupations?	1	2	3	4	5
13. In comparison with regular schools, how much opportunity does the Career Education Program provide for students' general learning?	1	2	3	4	5
14. In comparison with regular schools, how motivated to learn do you think students are in the Career Education Program?	1	2	3	4	5

15. What positive changes have you noticed in students that might be a result of participation in the Career Education Program?

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16. What negative changes have you noticed in students that might be a result of participation in the Career Education Program?

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Appendix C

TESTING INSTRUCTIONS

DIRECTIONS FOR TEST ADMINISTRATORS

Five instruments are to be administered in this testing session. They are:

1. Student Demographic Data Questionnaire (SDQ)
2. Comprehensive Tests of Basic Skills (CTBS)
3. Assessment of Career Development (ACD)
4. Student Attitude Survey (SAS)
5. Self-Directed Interest Inventory (SDII)

In some cases only portions of these tests should be given. The sequence of testing, specific test sections, and the time required are indicated in the recommended testing schedule below.

Optical scanning (mark sense) answer sheets are used for all tests. The CTBS requires two answer sheets. All other instruments use only one. Before students arrive, the SDQ should be placed on tables (or desks) so that every other space is vacant. A sharpened pencil should accompany each instrument. The administrator should have a supply of extra pencils.

As students enter the testing room, seat them such that every other seat is vacant, or such that the maximum available space is allocated to each individual. After all students have been seated, describe the testing sequence and the use of optical scanning answer sheets. Stress that the instruments are used to evaluate school program effectiveness, not individual students. Then proceed with the instructions for each test.

It is important that each test be administered strictly according to the instructions. Talking and movement about the testing room must be kept at a minimum. The sharing of answers among students must be strongly discouraged. Any irregularities should be reported to the testing supervisor and noted during the testing session.

As each instrument is completed, collect the instrument forms and answer sheets. In some cases the test itself is also the answer sheet. Check to make certain that each student has indicated his/her name and that the answers are marked in the proper answer sheet areas. This should also be checked during the testing. The collected answer sheets for each instrument should be placed in an envelope, marked for identification, and forwarded to the testing supervisor.

TESTING SCHEDULE

	Instrument	Time*
Session 1	SDQ	15
	CTBS, Read. Comp.	30
	CTBS, Lang. Mech.	11
	CTBS, Lang. Expr.	16
	CTBS, Arith. Con.	15
	CTBS, Arith. Appl.	14
		101 minutes
Session 2	ACD , Job Knowledge	30
	ACD , Career Planning	20
	SAS	30
	SDII	30
		110 minutes

*Additional time is needed to give instructions, distribute materials, and collect completed forms. Approximately 2 - 2-1/2 hours should be available for each session.

SDQ

STUDENTS DEMOGRAPHIC DATA QUESTIONNAIRE

After students are seated, begin the instructions for the SDQ.

SAY: There is a questionnaire sheet on the table in front of you. If anyone does not have a questionnaire and a pencil, raise your hand and one will be given to you.

WAIT for additional materials to be distributed.

SAY: This is a questionnaire designed to obtain background information about you. It is not a test and there are no right or wrong answers. Please read each question carefully and answer each one accurately. Fill in your name in the spaces which are provided and complete the name grid. Then begin answering the questions by blackening in all appropriate boxes on your sheet. Do not fill in the site and student ID section which appears in the lower right hand section of the form. Answer marks should be neat and clean. Be sure you mark only one answer for each item. If you make a mistake or want to change an answer, erase your first answer completely. If there are any questions raise your hand.

It should take students approximately 15 minutes to complete the SDQ. Make sure that each student has finished. Then, collect the completed sheets and prepare them for delivery.

CTBS

COMPREHENSIVE TESTS OF BASIC SKILLS

Five subtests of the CTBS will be administered:

1. Test 2, Reading Comprehension
2. Test 3, Language Mechanics
3. Test 4, Language Expression
4. Test 7, Arithmetic Concepts
5. Test 8, Arithmetic Applications

The directions for administration are found in the Examiner's Manual.

Pass out the test booklet and ANSWER SHEET 5902, and have students fill in the spaces for SCHOOL, TEST DATE, and NAME GRID. Turn to Page 15 of the Examiner's Manual and follow the specific instructions for administering the battery.

Then, turn to Page 18 and follow the instructions for Test 2 - Reading Comprehension. This test requires 30 minutes. The answers are recorded on the answer sheet headed READING in the spaces for TEST 2 COMPREHENSION.

Next, turn to Page 20 and follow the instructions for Test 3 - Language Mechanics and Test 4 - Language Expression. These tests require 27 minutes. The answers are recorded on the other side (headed LANGUAGE) of the READING answer sheet in the spaces indicated for TEST 3 Mechanics and TEST 4 EXPRESSION. Be sure to time Tests 3 and 4 separately.

At the conclusion of these tests, collect the completed answer sheets and pass out ANSWER SHEET 5908 for the remaining tests. Students should fill in the spaces for SCHOOL, TEST DATE, and NAME GRID.

Then turn to Page 27 of the Examiner's Manual and follow the instructions for Test 7 - Arithmetic Concepts and Test 8 - Arithmetic Applications. These tests require 29 minutes. The answers are recorded on the answer sheet headed ARITHMETIC in the spaces indicated for TEST 7 CONCEPTS and TEST 8 APPLICATIONS.

This concludes the CTBS administration. Collect all test materials and prepare the completed answer sheets for delivery.

ACD

ASSESSMENT OF CAREER DEVELOPMENT

Two units (subtests) of the ACD will be administered:

1. Unit 1, Job Knowledge
2. Unit 5, Career Planning Knowledge

The directions for administration are found in the Student Test Booklet.

Pass out the test booklet and answer sheet. Ask students to fill in the spaces for SCHOOL, DATE, and NAME. Then turn to Page 3 of the Student Test Booklet and read the directions, adding a statement after the first sentence to indicate that only Units 1 and 5 are to be done.

Let the students begin Unit 1, Job Knowledge. Allow 30 minutes for completion of the test. The answers are to be recorded on the front side of the answer sheet in the spaces indicated for 1 JOB KNOWLEDGE.

Then, turn to Page 17 and read the instructions for Unit 5, Career Planning Knowledge. Let the students begin this section. Allow 20 minutes for completion. The answers are to be recorded on the back side of the answer sheet in the spaces indicated for 5 CAREER PLANNING KNOWLEDGE.

This concludes the ACD administration. Collect all test materials and prepare the completed answer sheets for delivery.

SAS

STUDENT ATTITUDE SURVEY

Hand out the SAS forms. Ask students to fill in the spaces for DATE, NAME, and SCHOOL. Then read the directions below.

SAY: In developing school programs and planning for the future, it is important to know what students think about various aspects of their life and education. This questionnaire has been designed to give you an opportunity to express your opinions about these issues based on your experiences.

This is not a test and there are no right or wrong answers. Your honest opinions will be appreciated and helpful in improving the school program. All answers will be kept confidential. Please fill in your school and the date. If you have any questions, raise your hand for assistance.

Please read each statement carefully and think about your experiences in terms of what the statement says. Be sure to fill in the correct space for each question. If you change your mind, erase the mark completely and then fill in your new answer.

For each statement, fill in the number on the answer sheet which shows the extent of your agreement or disagreement with the statement. Each statement can be answered "1", "2", "3", "4", or "5". A "5" means that you strongly agree with what the statement says. A "4" means that you agree with the statement. A "3" means that you are not sure if you agree or disagree. A "2" means that you disagree with the statement and a "1" means that you strongly disagree.

You may begin.

It should take students approximately 30 minutes to complete the SAS. Make certain that each student has finished. Then collect the completed sheets and prepare them for delivery.

SDII

SELF DIRECTED INTEREST INVENTORY

Distribute the SDII test booklets and answer sheets. Ask students to fill in the space for NAME. Then read the following directions.

This inventory has been designed to explore your career interests by asking you to rate activities, occupations and your own abilities. It is not a test, and there are no right or wrong answers. Your opinions will be helpful in improving school programs for you and other students. All individual inventories will be kept confidential.

There are five sections to the Self-Directed Interest Inventory. They deal with:

- -- listing occupations that you have considered,
- -- indicating activities that you like or dislike,
- -- evaluating competencies that you have in performing different activities,
- -- rating occupations that you find interesting or not interesting,
- -- making self estimates of your own abilities in different areas.

Within each section a series of items is presented. Read each item, think about it and record your response on the answer sheet.

Please make no marks on the inventory; answer all items on the answer sheet, where spaces are numbered to correspond with the item numbers on the inventory. Be sure to fill in the correct answer space for each item. If you change your mind, erase the answer mark completely before filling in a new one. Write your name on the answer sheet and fill in the name grid. If you have any questions, raise your hand for assistance.

It should take students approximately 30 minutes to complete the SDII. Make sure that each student has finished. Then collect the test materials and prepare the completed answer sheets for delivery.

Appendix D

STATISTICAL TABLES

Table D-1

SAISD Student Attitude Survey Analysis of Covariance

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                                        GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POSLEARN

SOURCE                DF      SUM OF SQUARES         MEAN SQUARE        F VALUE          PR > F       R-SQUARE             C.V.

MODEL                  5     105892.83449473      21178.56689895          13.31          0.0001       0.711453          10.8226

ERROR                 27      42947.40792951       1590.64473813                        STD DEV                 POSLEARN MEAN

CORRECTED TOTAL       32     148840.24242424                                        39.88288779                  368.51515152

SOURCE                DF           TYPE I SS       F VALUE      PR > F       DF         TYPE IV SS      F VALUE         PR > F

GROUP                  1         30.92287537          0.02      0.8901        1      2955.02925864         1.86 *      0.1841
PRELEARN               1      96428.86485951         60.62      0.0001        1     80532.77838123        50.63        0.0001
PRECARR                1          5.67493763          0.00      0.9528        1       368.53746338         0.23        0.6342
PRESELF                1       8990.96669146          5.65      0.0248        1      7524.09726753         4.73        0.0386
PREOTHER               1        436.40513077          0.27      0.6047        1       436.40513077         0.27        0.6047



                          ANALYSIS OF CARREER ATTITUDE SURVEY DATA FOR SITE 55       13:59 THURSDAY, JULY 28, 1977      5

                                        GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POSCARR

SOURCE                DF      SUM OF SQUARES         MEAN SQUARE        F VALUE          PR > F       R-SQUARE             C.V.

MODEL                  5      33406.48226071       6681.29645214           9.91          0.0001       0.647184           6.6671

ERROR                 27      18211.69955747        674.50739102                        STD DEV                  POSCARR MEAN

CORRECTED TOTAL       32      51618.18181818                                        25.97128012                  389.54545455

SOURCE                DF           TYPE I SS       F VALUE      PR > F       DF         TYPE IV SS      F VALUE         PR > F

GROUP                  1       1200.33219412          1.78      0.1933        1       277.07747590         0.41        0.5270
PRELEARN               1      14308.10856686         21.21      0.0001        1      3687.37148982         5.47        0.0270
PRECARR                1      17815.93669249         26.41      0.0001        1     14998.12945226        22.24        0.0001
PRESELF                1         35.26164412          0.05      0.8209        1        55.38211828         0.08        0.7766
PREOTHER               1         46.84316312          0.07      0.7941        1        46.84316312         0.07        0.7941
```

*$p < .10$

Table D-1 (con't)

```
              ANALYSIS OF CARREER ATTITUDE SURVEY DATA FOR SITE 55        13:59 THURSDAY, JULY 28, 1977     6
                             GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POSSELF

SOURCE                  DF     SUM OF SQUARES       MEAN SQUARE        F VALUE        PR > F      R-SQUARE          C.V.

MODEL                    5     26265.39304119     5253.07860824           5.40        0.0014      0.499892        8.2411

ERROR                   27     26276.78877699      973.21439915                      STD DEV                  POSSELF MEAN

CORRECTED TOTAL         32     52542.18181818                                    31.19638439                  378.54545455

SOURCE                  DF        TYPE I SS     F VALUE      PR > F       DF           TYPE IV SS     F VALUE       PR > F

GROUP                    1     1104.69309638       1.14      0.2961        1        304.00517914        0.31       0.5808
PRELEARN                 1     9628.78534454       9.89      0.0040        1       1713.45310923        1.76       0.1957
PRECARR                  1      785.20406689       0.81      0.3770        1         43.29271149        0.04       0.9345
PRESELF                  1    14746.67248160      15.15      0.0006        1      13839.44934000       14.22       0.0008
PREOTHER                 1        0.03805178       0.00      0.9951        1          0.03805178        0.00       0.9951
```

```
              ANALYSIS OF CARREER ATTITUDE SURVEY DATA FOR SITE 55        13:59 THURSDAY, JULY 28, 1977     7
                             GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POSOTHER

SOURCE                  DF     SUM OF SQUARES       MEAN SQUARE        F VALUE        PR > F      R-SQUARE          C.V.

MODEL                    5     40121.00181568     8024.20036314           6.26        0.0006      0.536682        9.8185

ERROR                   27     34636.51333583     1282.83382725                      STD DEV                 POSOTHER MEAN

CORRECTED TOTAL         32     74757.51515152                                    35.81666968                  364.78787879

SOURCE                  DF        TYPE I SS     F VALUE      PR > F       DF           TYPE IV SS     F VALUE       PR > F

GROUP                    1     4816.13169287       3.75      0.0632        1       3361.20902957        2.62 *     0.1171
PRELEARN                 1    20465.99522154      15.95      0.0005        1       2477.36216086        1.93       0.1760
PRECARR                  1       74.31779601       0.06      0.8116        1        340.69580660        0.27       0.6105
PRESELF                  1     2200.32833334       1.72      0.2013        1        317.98846569        0.25       0.6226
PREOTHER                 1    12564.22877193       9.79      0.0042        1      12564.22877193        9.79       0.004
```

*p <.10

Table D-1 (con't)

```
         ANALYSIS OF CARREER ATTITUDE SURVEY DATA FOR SITE 55      13:59 THURSDAY, JULY 28, 1977   10
                         GENERAL LINEAR MODELS PROCEDURE
      MANOVA TEST CRITERIA FOR THE HYPOTHESIS OF NO OVERALL GROUP EFFECT

                    H = TYPE IV SS&CP MATRIX FOR: GROUP
                    E = ERROR SS&CP MATRIX
                    P = DEP. VARIABLES =        4
                    Q = RANK OF H       =        1
                    NE= DF OF E         =       27
                    S = MIN(P,Q)        =        1
                    M = .5(ABS(P-Q)-1)  =      1.0
                    N = .5(NE-P-1)      =     11.0
--------------------------------------------------------------------------------------------

HOTELLING-LAWLEY TRACE = TR(E**-1*H) =             0.23275170      (SEE PILLAI'S TABLE #3)

      F APPROXIMATION = 2(S*N+1)*TR(E**-1*H)/(S*S*(2M+S+1))     WITH S(2M+S+1) AND 2(S*N+1) DF

            F(4,24) =      1.40      PROB > F = 0.2651   N.S.
--------------------------------------------------------------------------------------------

PILLAI'S TRACE          V = TR(H*INV(H+E)) =       0.18880663      (SEE PILLAI'S TABLE #2)

      F APPROXIMATION = (2N+S+1)/(2M+S+1) * V/(S-V)             WITH S(2M+S+1) AND S(2N+S+1) DF

            F(4,24) =      1.40      PROB > F = 0.2651
--------------------------------------------------------------------------------------------

WILKS' CRITERION        L = DET(E)/DET(H+E) =      0.81119337      (SEE BKA VOL 53 P 347)

      W = -(NE-.5(P-Q+1))*LN(L)      .      =          5.2312
--------------------------------------------------------------------------------------------

ROY'S MAXIMUM ROOT CRITERION =                     0.23275170      (SEE AMS VOL 31 P 625)

      FIRST CANONICAL VARIABLE YIELDS AN F UPPER BOUND

            F(1,27) =      6.28      (UPPER BOUND)
--------------------------------------------------------------------------------------------
```

Table D-1 (con't)

```
                                  E = ERROR SS&CP MATRIX

DF=27                POSLEARN              POSCARR               POSSELF               POSOTHER

POSLEARN       42947.40792951         9661.60827185         8517.18591542        14417.23797630
POSCARR         9661.60827185        18211.69955747         8956.15135085         3132.86777361
POSSELF         8517.18591542         8956.15135085        26276.78877699        13317.79972659
POSOTHER       14417.23797630         3132.86777361        13317.79972659        34636.51333583

          PARTIAL CORRELATION COEFFICIENTS FROM THE ERROR SS&CP MATRIX  /  PROB > |R|

                    DF=26      POSLEARN   POSCARR   POSSELF  POSOTHER

                    POSLEARN   1.000000  0.345466  0.253537  0.373806
                                 0.0000    0.0718    0.1930    0.0501

                    POSCARR    0.345466  1.000000  0.409412  0.124738
                                 0.0718    0.0000    0.0305    0.5271

                    POSSELF    0.253537  0.409412  1.000000  0.441448
                                 0.1930    0.0305    0.0000    0.0187

                    POSOTHER   0.373806  0.124738  0.441448  1.000000
                                 0.0501    0.5271    0.0187    0.0000


                             H = TYPE IV SS&CP MATRIX FOR: GROUP

DF=1                 POSLEARN              POSCARR               POSSELF               POSOTHER

POSLEARN        2955.02925864          904.86023683         -947.81021261         3151.58230525
POSCARR          904.86023683          277.07747590         -290.22919856          965.04679363
POSSELF         -947.81021261         -290.22919856          304.00517914        -1010.85357651
POSOTHER        3151.58230525          965.04679363        -1010.85357651         3361.20902957

CHARACTERISTIC ROOTS AND VECTORS OF: E INVERSE * H, WHERE  H = TYPE IV SS&CP MATRIX FOR: GROUP     E = ERROR SS&CP MATRIX

         CHARACTERISTIC   PERCENT      CHARACTERISTIC VECTOR   V'EV=1
              ROOT
                                        POSLEARN          POSCARR          POSSELF          POSOTHER

          0.23275170      100.00      0.00146282       0.00286140      -0.00514637       0.00458059

          0.00000000        0.00      0.00431383       0.00035546      -0.00087902      -0.00441121

          0.00000000        0.00      0.00244295      -0.00235600       0.00536726       0.00000000

          0.00000000        0.00     -0.00188706       0.00770960       0.00037299      -0.00033199
```

Table D-2

HISD Student Attitude Survey Analysis of Covariance

```
                                        GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POSLEARN

SOURCE                 DF        SUM OF SQUARES          MEAN SQUARE        F VALUE          PR > F        R-SQUARE          C.V.

MODEL                   5        80941.40667016       16188.28133403           5.61          0.0015        0.538744       15.1780

ERROR                  24        69299.55999651        2887.48166652                        STD DEV                  POSLEARN MEAN

CORRECTED TOTAL        29       150240.96666667                                          53.73529256                  354.03333333


SOURCE                 DF            TYPE I SS       F VALUE      PR > F        DF           TYPE IV SS        F VALUE        PR > F

GROUP                   1       69481.20196078         24.06      0.0001         1       49373.27004385        17.10 *      0.0004
PRELEARN                1        6324.65526027          2.19      0.1519         1        2994.89206801         1.04        0.3186
PRECARR                 1        3362.77193007          1.16      0.2912         1        1409.38027796         0.49        0.4915
PRESELF                 1         118.52371147          0.04      0.8412         1         587.44614184         0.20        0.6560
PREOTHER                1        1654.25380757          0.57      0.4565         1        1654.25380757         0.57        0.4565
```

```
                              ANALYSIS OF CARREER ATTITUDE SURVEY DATA FOR SITE 56        15:15 THURSDAY, JULY 28, 1977      5
                                        GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POSCARR

SOURCE                 DF        SUM OF SQUARES          MEAN SQUARE        F VALUE          PR > F        R-SQUARE          C.V.

MODEL                   5        33905.33612174        6781.06722435           6.00          0.0010        0.555567        8.3980

ERROR                  24        27122.96387826        1130.12349493                        STD DEV                   POSCARR MEAN

CORRECTED TOTAL        29        61028.30000000                                          33.61730945                  400.30000000


SOURCE                 DF            TYPE I SS       F VALUE      PR > F        DF           TYPE IV SS        F VALUE        PR > F

GROUP                   1        6386.28190045          5.65      0.0258         1        1337.10214467         1.18        0.2875
PRELEARN                1        7202.59552018          6.37      0.0186         1        1644.16014245         1.45        0.2395
PRECARR                 1       11056.43226331          9.78      0.0046         1        2949.31307770         2.61        0.1193
PRESELF                 1        2273.43030290          2.01      0.1689         1         254.47341880         0.23        0.6394
PREOTHER                1        6986.59613489          6.18      0.0203         1        6986.59613489         6.18        0.0203
```

* $p < .10$

Table D-2 (con't)

```
                    ANALYSIS OF CARREER ATTITUDE SURVEY DATA FOR SITE 56     15:15 THURSDAY, JULY 28, 1977    6
                                GENERAL LINEAR MODELS PROCEDURE
DEPENDENT VARIABLE: POSSELF

SOURCE                DF      SUM OF SQUARES       MEAN SQUARE       F VALUE        PR > F      R-SQUARE          C.V.

MODEL                  5      97363.14407776    19472.62881555         21.87        0.0001      0.820004        7.9352

ERROR                 24      21371.82258890      890.49260787                     STD DEV                 POSSELF MEAN

CORRECTED TOTAL       29     118734.96666667                                   29.84112276                 376.03333333

SOURCE                DF         TYPE I SS     F VALUE     PR > F      DF        TYPE IV SS     F VALUE       PR > F

GROUP
PRELEARN               1    16860.98476621       18.93     0.0002       1     1940.48394548        2.18  *    0.1529
PRECARR                1     4932.61791473        5.54     0.0271       1     2825.75281178        3.17       0.0875
PRESELF                1      139.50254668        0.16     0.6957       1     6350.94672653        7.13       0.0134
PREOTHER               1    69652.92109988       78.22     0.0001       1    49086.20864521       55.12       0.0001
                       1     5777.11775026        6.49     0.0177       1     5777.11775026        6.49       0.0177
```

```
                    ANALYSIS OF CARREER ATTITUDE SURVEY DATA FOR SITE 56     15:15 THURSDAY, JULY 28, 1977    7
                                GENERAL LINEAR MODELS PROCEDURE
DEPENDENT VARIABLE: POSOTHER

SOURCE                DF      SUM OF SQUARES       MEAN SQUARE       F VALUE        PR > F      R-SQUARE          C.V.

MODEL                  5     105390.83135630    21078.16627126         12.96        0.0001      0.729698       10.8614

ERROR                 24      39039.83531037     1626.65980460                     STD DEV                POSOTHER MEAN

CORRECTED TOTAL       29     144430.66666667                                   40.33187083                 371.33333333

SOURCE                DF         TYPE I SS     F VALUE     PR > F      DF        TYPE IV SS     F VALUE       PR > F

GROUP
PRELEARN               1     9484.90196078        5.83     0.0237       1     6146.70059689        3.78  *    0.0637
PRECARR                1       87.68250719        0.05     0.8184       1      262.18373546        0.16       0.6915
PRESELF                1    16072.29808735        9.88     0.0044       1       39.52227526        0.02       0.8774
PREOTHER               1     5593.79116798        3.44     0.0760       1      558.81696843        0.34       0.5633
                       1    74152.15763299       45.59     0.0001       1    74152.15763299       45.59       0.0001
```

*p = 10

Table D-2 (con't)

```
                                        E = ERROR SS&CP MATRIX

DF=24                 POSLEARN                   POSCARR                   POSSELF                   POSOTHER

POSLEARN         69299.55999651            15354.39852861            11821.78537095              7619.60344977
POSCARR          15354.39852861            27122.96387826             2729.37529506              3867.63951286
POSSELF          11821.78537095             2729.37529506            21371.82253890              1209.87743522
POSOTHER          7619.60344977             3867.63951286             1209.87743522             39039.83531037

               PARTIAL CORRELATION COEFFICIENTS FROM THE ERROR SS&CP MATRIX  /  PROB > |R|

                       DF=23        POSLEARN    POSCARR    POSSELF   POSOTHER

                       POSLEARN     1.000000   0.354160   0.307183   0.146492
                                      0.0000     0.0824     0.1353     0.4847

                       POSCARR      0.354160   1.000000   0.113364   0.118857
                                      0.0824     0.0000     0.5895     0.5715

                       POSSELF      0.307183   0.113364   1.000000   0.041886
                                      0.1353     0.5895     0.0000     0.8424

                       POSOTHER     0.146492   0.118857   0.041886   1.000000
                                      0.4847     0.5715     0.8424     0.0000



                                H = TYPE IV SS&CP MATRIX FOR: GROUP

DF=1                  POSLEARN                   POSCARR                   POSSELF                   POSOTHER

POSLEARN         49373.27004885             8125.09109313             9788.15804254             17420.75510647
POSCARR           8125.09109313             1337.10214467             1610.78404673              2866.83912138
POSSELF           9788.15804254             1610.78404673             1940.48394548              3453.63197604
POSOTHER         17420.75510647             2866.83912138             3453.63197604              6146.70059687

CHARACTERISTIC ROOTS AND VECTORS OF: E INVERSE * H, WHERE  H = TYPE IV SS&CP MATRIX FOR: GROUP     E = ERROR SS&CP MATRIX

                CHARACTERISTIC    PERCENT      CHARACTERISTIC VECTOR   V'EV=1
                     ROOT
                                                  POSLEARN          POSCARR          POSSELF          POSOTHER

                   0.80129498      100.00        0.00350667      -0.00074718       0.00036650       0.00162170

                   0.00000000        0.00       -0.00111477       0.00645152       0.00000078       0.00014999

                   0.00000000        0.00       -0.00139525       0.00000388       0.00717865      -0.00008090

                   0.00000000        0.00       -0.00164754      -0.00044698       0.00002514       0.00486374
```

Table D-2 (con't)

```
            ANALYSIS OF CARREER ATTITUDE SURVEY DATA FOR SITE 56      15:15 THURSDAY, JULY 28, 1977   10

                          GENERAL LINEAR MODELS PROCEDURE

              MANOVA TEST CRITERIA FOR THE HYPOTHESIS OF NO OVERALL GROUP EFFECT

                                 H = TYPE IV SS&CP MATRIX FOR: GROUP
                                 E = ERROR SS&CP MATRIX
                                 P = DEP. VARIABLES =        4
                                 Q = RANK OF H      =        1
                                 NE= DF OF E        =       24
                                 S = MIN(P,Q)       =        1
                                 M = .5(ABS(P-Q)-1) =      1.0
                                 N = .5(NE-P-1)     =      9.5

--------------------------------------------------------------------------------------------------

HOTELLING-LAWLEY TRACE = TR(E**-1*H) =             0.80129498      (SEE PILLAI'S TABLE #3)

        F APPROXIMATION = 2(S*N+1)*TR(E**-1*H)/(S*S*(2M+S+1))   WITH S(2M+S+1) AND 2(S*N+1) DF

               F(4,21) =      4.21      PROB > F = 0.0117

--------------------------------------------------------------------------------------------------

PILLAI'S TRACE         V = TR(H*INV(H+E)) =        0.44484384      (SEE PILLAI'S TABLE #2)

        F APPOXIMATION = (2N+S+1)/(2M+S+1) * V/(S-V)            WITH S(2M+S+1) AND S(2N+S+1) DF

               F(4,21) =      4.21      PROB > F = 0.0117  *

--------------------------------------------------------------------------------------------------

WILKS' CRITERION       L = DET(E)/DET(H+E) =       0.55515616      (SEE BKA VOL 53 P 347)

        W = -(NE-.5(P-Q+1))*LN(L)          =          12.9471

--------------------------------------------------------------------------------------------------

ROY'S MAXIMUM ROOT CRITERION =                     0.80129498      (SEE AMS VOL 31 P 625)

        FIRST CANONICAL VARIABLE YIELDS AN F UPPER BOUND

               F(1,24) =     19.23      (UPPER BOUND)

--------------------------------------------------------------------------------------------------
```

Table D-3

SAISD Assessment of Career Development Analysis of Covariance

```
                                          GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: PCS_CHAR

SOURCE                  DF       SUM OF SQUARES          MEAN SQUARE        F VALUE          PR > F        R-SQUARE            C.V.

MODEL                    4       650.18502481         162.54625620          18.92          0.0001        0.729948          7.1330

ERROR                   28       240.54224791           8.59079457                          STD DEV                   PCS_CHAR MEAN

CORRECTED TOTAL         32       890.72727273                                             2.93100573                    41.09090909

SOURCE                  DF           TYPE I SS      F VALUE      PR > F         DF          TYPE IV SS       F VALUE        PR > F

GROUP                    1        137.34381408        15.99      0.0004          1          7.39361428          0.86        0.3615
PRE_CHAR                 1        497.63404755        57.93      0.0001          1        193.70757154         22.55        0.0001
PRE_PREP                 1          0.53520874         0.06      0.8047          1          0.00431904          0.00        0.9823
PRE_PLAN                 1         14.67195444         1.71      0.2019          1         14.67195444          1.71        0.2019


                                          OCCUPATIONAL ANALYSIS OF SITE 55                 15:12 TUESDAY, JULY 26, 1977     5

                                          GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: PCS_PREP

SOURCE                  DF       SUM OF SQUARES          MEAN SQUARE        F VALUE          PR > F        R-SQUARE            C.V.

MODEL                    4        54.23263354          13.55815838           4.52          0.0061        0.392301         13.4814

ERROR                   28        84.00979071           3.00034967                          STD DEV                   PCS_PREP MEAN

CORRECTED TOTAL         32       138.24242424                                             1.73215175                    12.84848485

SOURCE                  DF           TYPE I SS      F VALUE      PR > F         DF          TYPE IV SS       F VALUE        PR > F

GROUP                    1          1.02813853         0.34      0.5630          1          0.00033346          0.00        0.9917
PRE_CHAR                 1         33.12838859        11.04      0.0025          1          2.26159942          0.75        0.3927
PRE_PREP                 1         19.65266575         6.55      0.0162          1         20.05241122          6.69        0.0152
PRE_PLAN                 1          0.42344067         0.14      0.7100          1          0.42344067          0.14        0.7100
```

Table D-3 (con't)

```
                                              OCCUPATIONAL ANALYSIS OF SITE 55                15:12 TUESDAY, JULY 26, 1977    6

                                              GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POS_PLAN

SOURCE                    DF        SUM OF SQUARES          MEAN SQUARE          F VALUE          PR > F        R-SQUARE           C.V.

MODEL                      4          584.46896327         146.11724082            18.06          0.0001        0.720704        10.6535

ERROR                     28          226.50073370           8.08931192                          STD DEV                    POS_PLAN MEAN

CORRECTED TOTAL           32          810.96969697                                             2.84417157                      26.69696970

SOURCE                    DF             TYPE I SS      F VALUE      PR > F          DF           TYPE IV SS         F VALUE        PR > F

GROUP                      1           43.65014810         5.40      0.0277           1           3.99028403            0.49        0.4883
PRE_CHAR                   1          213.71444692        26.42      0.0001           1           0.11054207            0.01        0.9078
PRE_PREP                   1           45.61389575         5.64      0.0247           1          14.32587494            1.77        0.1940
PRE_PLAN                   1          281.49047250        34.80      0.0001           1         281.49047250           34.80        0.0001
```

Table D-3 (con't)

```
                    OCCUPATIONAL ANALYSIS OF SITE 55                 15:12 TUESDAY, JULY 26, 1977    7

                    GENERAL LINEAR MODELS PROCEDURE

                         E = ERROR SS&CP MATRIX

DF=28                  POS_CHAR                  POS_PREP                  POS_PLAN

POS_CHAR           240.54224791               37.42367290               25.15915272
POS_PREP            37.42367290               84.00979071               52.61999331
POS_PLAN            25.15915272               52.61999331              226.50073370

PARTIAL CORRELATION COEFFICIENTS FROM THE ERROR SS&CP MATRIX  /  PROB > |R|

                 DF=27        POS_CHAR  POS_PREP  POS_PLAN

                 POS_CHAR     1.000000  0.263261  0.107767
                                0.0000    0.1676    0.5778

                 POS_PREP     0.263261  1.000000  0.381462
                                0.1676    0.0000    0.0412

                 POS_PLAN     0.107787  0.381462  1.000000
                                0.5778    0.0412    0.0000
```

```
                    OCCUPATIONAL ANALYSIS OF SITE 55                 15:12 TUESDAY, JULY 26, 1977    8

                    GENERAL LINEAR MODELS PROCEDURE

                  H = TYPE IV SS&CP MATRIX FOR: GROUP

DF=1                   POS_CHAR                  POS_PREP                  POS_PLAN

POS_CHAR             7.39361428                0.04965346                5.43163152
POS_PREP             0.04965346                0.00033346                0.03647733
POS_PLAN             5.43163152                0.03647733                3.99028403

CHARACTERISTIC ROOTS AND VECTORS OF: E INVERSE * H, WHERE  H = TYPE IV SS&CP MATRIX FOR: GROUP     E = ERROR SS&CP MATRIX

             CHARACTERISTIC    PERCENT      CHARACTERISTIC VECTOR   V'EV=1
                  ROOT
                                              POS_CHAR        POS_PREP        POS_PLAN

               0.05279104      100.00       0.05236533     -0.05006502      0.04419852

               0.00000000        0.00      -0.00730826      0.10522676      0.00898618

               0.00000000        0.00      -0.04083545     -0.03486733      0.05597260
```

Table D-3 (con't)

```
                      OCCUPATIONAL ANALYSIS OF SITE 55                 15:12 TUESDAY, JULY 26, 1977    9

                      GENERAL LINEAR MODELS PROCEDURE

          MANOVA TEST CRITERIA FOR THE HYPOTHESIS OF NO OVERALL GROUP EFFECT

                         H = TYPE IV SS&CP MATRIX FOR: GROUP
                         E = ERROR SS&CP MATRIX
                         P = DEP. VARIABLES =        3
                         Q = RANK OF H      =        1
                         NE= DF OF E        =       28
                         S = MIN(P,Q)       =        1
                         M = .5(ABS(P-Q)-1) =      0.5
                         N = .5(NE-P-1)     =     12.0

-----------------------------------------------------------------------------------------------

HOTELLING-LAWLEY TRACE = TR(E**-1*H) =              0.05279104      (SEE PILLAI'S TABLE #3)

          F APPROXIMATION = 2(S*N+1)*TR(E**-1*H)/(S*S*(2M+S+1))      WITH S(2M+S+1) AND 2(S*N+1) DF

                    F(3,26) =     0.46      PROB > F = 0.7143

-----------------------------------------------------------------------------------------------

PILLAI'S TRACE          V = TR(H*INV(H+E)) =        0.05014389      (SEE PILLAI'S TABLE #2)

          F APPROXIMATION = (2N+S+1)/(2M+S+1) * V/(S-V)              WITH S(2M+S+1) AND S(2N+S+1) DF

                    F(3,26) =     0.46      PROB > F = 0.7143   NS

-----------------------------------------------------------------------------------------------

WILKS' CRITERION        L = DET(E)/DET(H+E) =       0.94985611      (SEE BKA VOL 53 P 347)

          W = -(NE-.5(P-Q+1))*LN(L)         =              1.3633

-----------------------------------------------------------------------------------------------

ROY'S MAXIMUM ROOT CRITERION =                      0.05279104      (SEE AMS VOL 31 P 625)

          FIRST CANONICAL VARIABLE YIELDS AN F UPPER BOUND

                    F(1,28) =     1.48      (UPPER BOUND)

-----------------------------------------------------------------------------------------------
```

Table D-4

HISD Assessment of Career Development Analysis of Covariance

```
                                        GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POS_CHAR

SOURCE                 DF        SUM OF SQUARES          MEAN SQUARE          F VALUE          PR > F        R-SQUARE           C.V.

MODEL                   4        1458.05644320         364.51411080           12.83          0.0001        0.623397          14.2357

ERROR                  31         880.83244564          28.41394986                          STD DEV                    POS_CHAR MEAN

CORRECTED TOTAL        35.       2338.88888889                                             5.33047370                     37.44444444

SOURCE                 DF           TYPE I SS        F VALUE        PR > F         DF          TYPE IV SS         F VALUE         PR > F

GROUP                   1         32.93888889           1.16        0.2899          1         96.14869434            3.38 *       0.0754
PRE_CHAR                1       1227.19926174          43.19        0.0001          1        161.61699313            5.69         0.0234
PRE_PREP                1         74.23910724           2.61        0.1161          1         27.22798704            0.96         0.3352
PRE_PLAN                1        123.67918528           4.35        0.0453          1        123.67918528            4.35         0.0453


                                        OCCUPATIONAL ANALYSIS OF SITE 55                15:17 TUESDAY, JULY 26, 1977     5

                                        GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POS_PREP

SOURCE                 DF        SUM OF SQUARES          MEAN SQUARE          F VALUE          PR > F        R-SQUARE           C.V.

MODEL                   4         163.91362697          40.97840674           10.49          0.0001        0.575136          15.8109

ERROR                  31         121.08637303           3.90601203                          STD DEV                    POS_PREP MEAN

CORRECTED TOTAL        35         285.00000000                                             1.97636334                     12.50000000

SOURCE                 DF           TYPE I SS        F VALUE        PR > F         DF          TYPE IV SS         F VALUE         PR > F

GROUP                   1          0.45000000           0.12        0.7366          1          5.21256015            1.33         0.2568
PRE_CHAR                1        118.17962536          30.26        0.0001          1          3.30355528            0.85         0.3649
PRE_PREP                1         36.94062160           9.46        0.0044          1         25.46816344            6.52         0.0158
PRE_PLAN                1          8.34338001           2.14        0.1539          1          8.34338001            2.14         0.1539
```

*p < .10

Table D-4 (con't)

```
                                           OCCUPATIONAL ANALYSIS OF SITE 56                     15:17 TUESDAY, JULY 26, 1977    6

                                           GENERAL LINEAR MODELS PROCEDURE

DEPENDENT VARIABLE: POS_PLAN

SOURCE                  DF        SUM OF SQUARES          MEAN SQUARE          F VALUE          PR > F         R-SQUARE            C.V.

MODEL                    4          680.33393656         170.08348414            10.25          0.0001         0.569370         15.3419

ERROR                   31          514.55495233          16.59854685                          STD DEV                     POS_PLAN MEAN

CORRECTED TOTAL         35         1194.88888889                                             4.07413142                       26.55555556

SOURCE                  DF           TYPE I SS     F VALUE      PR > F          DF          TYPE IV SS      F VALUE        PR > F

GROUP                    1          1.70138539        0.10      0.7510           1         17.01546629         1.03        0.3191
PRE_CHAP                 1        583.00406016       35.12      0.0001           1         78.95403244         4.76        0.0349
PRE_PREP                 1         30.93514376        1.87      0.1317           1          9.83044433         0.59        0.4474
PRE_PLAN                 1         64.64334375        3.89      0.0574           1         64.64334375         3.89        0.0574
```

Table D-4 (con't)

```
                    OCCUPATIONAL ANALYSIS OF SITE 56                15:17 TUESDAY, JULY 26, 1977    7

                    GENERAL LINEAR MODELS PROCEDURE

                         E = ERROR SS&CP MATRIX

DF=31                    POS_CHAR                 POS_PREP                  POS_PLAN

POS_CHAR              880.83244569             173.83048416              225.39853489
POS_PREP              173.83048416             121.08637303              109.58255337
POS_PLAN              225.39853489             109.58255337              514.55495233

PARTIAL CORRELATION COEFFICIENTS FROM THE ERROR SS&CP MATRIX  /  PROB > |R|

                DF=30        POS_CHAR  POS_PREP  POS_PLAN

                POS_CHAR     1.000000  0.532270  0.334802
                               0.0000    0.0017    0.0611

                POS_PREP     0.532270  1.000000  0.439014
                               0.0017    0.0000    0.0119

                POS_PLAN     0.334802  0.439014  1.000000
                               0.0611    0.0119    0.0000
```

```
                    OCCUPATIONAL ANALYSIS OF SITE 56                15:17 TUESDAY, JULY 26, 1977    8

                    GENERAL LINEAR MODELS PROCEDURE

                    H = TYPE IV SS&CP MATRIX FOR: GROUP

DF=1                     POS_CHAR                 POS_PREP                  POS_PLAN

POS_CHAR              96.14869434              22.38706886               40.44768061
POS_PREP              22.38706886               5.21256015                9.41775671
POS_PLAN              40.44768061               9.41775671               17.01546629

CHARACTERISTIC ROOTS AND VECTORS OF: E INVERSE * H, WHERE  H = TYPE IV SS&CP MATRIX FOR: GROUP     E = ERROR SS&CP MATRIX

            CHARACTERISTIC   PERCENT      CHARACTERISTIC VECTOR   V'EV=1
                 ROOT
                                            POS_CHAR         POS_PREP          POS_PLAN

              0.11505012     100.00       0.02943091       0.00447948        0.00978846

              0.00000000       0.00      -0.02483604       0.10666650        0.00000000

              0.00000000       0.00      -0.01138304      -0.03878855        0.04852754
```

Table D-4 (con't)

```
                         OCCUPATIONAL ANALYSIS OF SITE 56                      15:17 TUESDAY, JULY 26, 1977    9

                         GENERAL LINEAR MODELS PROCEDURE

              MANOVA TEST CRITERIA FOR THE HYPOTHESIS OF NO OVERALL GROUP EFFECT

                                   H = TYPE IV SSCP MATRIX FOR: GROUP
                                   E = ERROR SSCP MATRIX
                                   P = DEP. VARIABLES =        3
                                   Q = RANK OF H      =        1
                                   NE= DF OF E        =       31
                                   S = MIN(P,Q)       =        1
                                   M = .5(ABS(P-Q)-1) =      0.5
                                   N = .5(NE-P-1)     =     13.5

--------------------------------------------------------------------------------------------------------

HOTELLING-LAWLEY TRACE = TR(E**-1*H) =              0.11505012     (SEE PILLAI'S TABLE #3)

         F APPROXIMATION = 2(S*N+1)*TR(E**-1*H)/(S*S*(2M+S+1))     WITH S(2M+S+1) AND 2(S*N+1) DF

                  F(3,29) =      1.11      PROB > F = 0.3602   NS

--------------------------------------------------------------------------------------------------------

PILLAI'S TRACE          V = TR(H*INV(H+E)) =        0.10317932     (SEE PILLAI'S TABLE #2)

         F APPROXIMATION = (2N+S+1)/(2M+S+1) * V/(S-V)             WITH S(2M+S+1) AND S(2N+S+1) DF

                  F(3,29) =      1.11      PROB > F = 0.3602

--------------------------------------------------------------------------------------------------------

WILKS' CRITERION        L = DET(E)/DET(H+E) =       0.89682068     (SEE BKA VOL 55 P 347)

         W = -(NE-.5(P-Q+1))*LN(L)           =          3.2125

--------------------------------------------------------------------------------------------------------

ROY'S MAXIMUM ROOT CRITERION =                      0.11505012     (SEE AMS VOL 31 P 625)

         FIRST CANONICAL VARIABLE YIELDS AN F UPPER BOUND

                  F(1,31) =      3.57      (UPPER BOUND)

--------------------------------------------------------------------------------------------------------
```

Table D-5

SDII-SAISD

Pretest Chi Squares

Category / Group	Match		No Match		Σ	Σ/n	x^2
	fo	fe	fo	fe			
Experimental	4	3.480	12	12.528	16	.696	.099
Control	1	1.520	6	5.472	7	.304	.229
Total	5	5.000	18	18.000	23	1.000	.328

SDII-SAISD

Posttest Chi Squares

Category / Group	Match		No Match		Σ	Σ/n	x^2
	fo	fe	fo	fe			
Experimental	8	6.264	8	9.744	16	.696	.793
Control	1	2.736	6	4.256	7	.304	1.815
Total	9	9.000	14	14.000	23	1.000	2.608

Table D-6

SDII-HISD

Pretest Chi Squares

Category / Group	Match		No Match		Σ	Σ/n	x^2
	fo	fe	fo	fe			
Experimental	10	10.860	9	8.145	19	.543	.158
Control	10	9.140	6	6.855	16	.457	.188
Total	20	20.000	15	15.000	35	1.000	.346

SDII-HISD

Posttest Chi Squares

Category / Group	Match		No Match		Σ	Σ/n	x^2
	fo	fe	fo	fe			
Experimental	7	5.973	12	13.032	19	.543	.259
Control	4	5.027	12	10.968	16	.457	.307
Total	11	11.000	24	24.000	35	1.000	.566

SCHEDULE FOR EBCE PLANNING SESSION, SAN ANTONIO, TEXAS
January 3 - 5, 1977

Monday, 1/3/77

8:30 (William Lafferty, Education Service Center, Region 20, San Antonio, Texas)

- Introductions
- San Antonio EBCE Demonstration Project as a complementary and alternate approach to secondary education for some students: definition and very brief history of grant award attainment

9:00 (Sue Cook, EBCE program trainer, Northwest Regional Educational Laboratory, Portland, Oregon)

Experience-Based Career Education:

- Overview of major characteristics (EBCE brochure)
- Brief background and progress, to date, of USOE, NIE, AND NIE's LABS involvement
- Relationship of Career Education to Vocational Education (Part D Programs) with emphasis on difference between VO-ED and EBCE
- Description of NWREL's original project in Tigard, Oregon and pilot site projects within Northwest region
- View slide/tape #1
- Question and answer period

10:00 (William Lafferty)

San Antonio EBCE Demonstration Project:

- Brief the San Antonio EBCE Demonstration Project Proposal, discuss in detail, and emphasize the significance of the current project as Texas' only EBCE program
- San Antonio EBCE - goal-national, state, and local
- San Antonio EBCE - processes and procedures for attainment - objectives, activities and time schedules
- San Antonio EBCE - evaluation of processes and outcome objectives
- San Antonio EBCE - career attainment, job placement, and follow-up
- San Antonio EBCE - results, dissemination, and program projections
- ESC-20 (including sub-contractual arrangement with NWREL, third-party evaluator)
- Participating independent school districts' school boards, administration and teachers
- Contractual arrangements and coordination among participating independent school districts, USOE and ESC-20
- Compliance with applicable directives and guidelines, including equal opportunity employment, affirmative action, safety standards, and fair-sex opportunity practices

-- Third-party evaluation: instrument used, data collection procedures, testing procedures, staff involvement, comparison group, student profile, evaluator's reports
-- Reports: procedures for submitting

(Sue Cook)

1:00 EBCE Curriculum in more detail:

-- Learning Strategies
-- Evaluation of student work
-- Slide/tape #2
-- Question and answer period

3:00 Relationship with community groups:

-- School personnel (gaining teacher's understanding and support of program; linkage with other programs that use community)
-- Students (status of EBCE students within the parent high school: access to classes; entry to special services and extra curricular)
-- Parents (involving them in program activities; alleviating and responding to concerns; maintaining their support)
-- Learning resource people (requirements, functions, responsibilities, identification and recruitment)
-- Advisory group (composition, functions, responsibilities; relation to EBCE program; relation to local school board)

Tuesday, 1/4/77

8:30 Review EBCE program requirements and San Antonio adaptation:

-- Special state and local requirements
-- Issues of evaluation, grades, credit and transcripts
-- Attendance and accountability

9:30 Student selection

-- Number in relation to staff
-- Degree of program participation (full-time only?)
-- Cross-section or special characteristics
-- Recruitment and selection process
-- Relation to evaluation design

10:30 EBCE staff

-- Roles and responsibilities
-- Interrelation with other district staff

11:30 Review EBCE Handbook use

1:00 Legal and logistical issues

- -- Insurance (needs specific to EBCE; review other EBCE programs' coverage; ascertain if any specific state or district requirements; delegate responsibility)
- -- Facility - learning centers within independent school districts: facilities requirements; program identity; instructional materials; audio-visual materials, and audio-visual equipment requirements; interrelations of learning center functions with community resources career development projects
- -- Transportation (geographical area; options available; requirements of students; financial arrangements; parent permission)
- -- Scheduling of students

Wednesday, 1/5/77

8:30 Review ongoing planning list and topics discussed. Summarize status for each

9:30 Compile a program description for the San Antonio EBCE Demonstration Project that reflects planning accomplished

1:00 Prepare a planning list, timeline, and designation of staff responsibilities for work remaining to be done

TABULATION

EDUCATION SERVICE CENTER, REGION 20

PARTICIPANT EVALUATION FORM

PROGRAM TITLE EBCE STAFF AWARENESS TRAINING SESSION

SCHOOL DISTRICT ESC, 20, Harlandale, San Antonio

CAMPUS N.A.

COUNTY Bexar County

ADDRESS N.A.

Monday, January 3, 1977

ASSIGNMENT LEVEL (check one)

0 ___ PRESCHOOL - K
1 ___ 1-3
2 ___ 4-6
3 ___ COMBINATION K-6
4 ___ COMB. ELEM. & JR. HIGH
5 ___ MIDDLE/JUNIOR
6 X HIGH SCHOOL
7 ___ COMB. JR. & SR. HIGH
8 ___ ALL LEVELS
9 ___ OTHER
10 ___ NOT APPLICABLE

SUBJECT OR ASSIGNMENT AREA (check one)

01 ___ SELF-CONTAINED
02 ___ LANGUAGE ARTS
03 ___ SOCIAL STUDIES
04 ___ MATHEMATICS
05 ___ SCIENCE
06 ___ HEALTH/PE
07 ___ FINE ARTS
08 ___ VOCATIONAL
09 ___ FOREIGN LANGUAGE
10 ___ BUSINESS EDUCATION
11 ___ DRIVER EDUCATION
12 ___ INDISTRIAL ARTS
13 ___ TMR
14 ___ EMR
15 ___ AH
16 ___ SH
17 ___ VH/PS
18 ___ ED
19 ___ OH/OHI
20 ___ L/LD
21 ___ MBI
22 ___ VOCATIONAL - SP. ED.
23 ___ EARLY CHILDHOOD
24 ___ ADMINISTRATION
25 ___ ANY COMB. OF 1-24
26 X OTHER: SPECIFY

POSITION (check one)

01 ___ REG. TEACHER
02 ___ PRINCIPAL
03 ___ VICE (ASST) PRIN.
04 ___ CONSULTANT
05 ___ DIAGNOSTICIAN
06 ___ AIDE
07 ___ SUPT.
08 ___ REG. COUNSELOR
09 ___ MEDIA SPEC.
10 ___ LIBRARIAN
11 ___ NURSE
12 ___ PHYSICIAN
13 ___ VISITING TEACHER
14 ___ CENTRAL ADM.
15 ___ STUDENT
16 ___ BOARD MEMBER
17 ___ SP. ED. TEACHER
18 ___ PSYCHOLOGIST
19 ___ SP. ED. COUNSELOR
20 ___ SP. ED. SUPERVISOR
21 ___ PARENT/VOLUNTEER
22 ___ OTHER: SPECIFY ___

Was your involvement in this program required? (check one)

1. X Yes 2. ___ No 3. ___ Do not know

Directions: Please circle the number which best represents your reaction to each of the items below:

	Excellent						Poor
1. The organization of this program was:	7 ⑦	6 ⑧	5 ⑤	4 ④	3	2	1
	Clearly Evident						Vague
2. The objectives of this program were:	7 ⑨	6 ⑪	5 ⑤	4 ②	3	2	1
	Excellent						Poor
3. The work of the consultant(s) used in this program was:	7 ⑨	6 ⑪	5 ⑤	4 ②	3	2	1
	Very Meaningful						Meaningless
4. The ideas and activities in this program were:	7 ⑥	6 ⑩	5 ⑧	4 ②	3	2	1
	Very Adequate						Inadequate
5. The scope of this program was:	7 ⑧	6 ⑩	5 ⑧	4 ①	3	2	1
	Very Beneficial						No Benefit
6. Involvement in this program should prove:	7 ⑫	6 ⑪	5 ②	4 ①	3	2	1
	Very High						Of No Value
7. Overall, I consider the value of this program to be:	7 ⑫	6 ⑩	5 ⑤	4 ○	3	2	1

TABULATION

EDUCATION SERVICE CENTER, REGION 20

PARTICIPANT EVALUATION FORM

PROGRAM TITLE EBCE STAFF AWARENESS TRAINING SESSION

SCHOOL DISTRICT ESC, 20, Harlandale, San Antonio

CAMPUS N.A.

COUNTY Bexar

ADDRESS N.A.

Tuesday, January 4, 1977

ASSIGNMENT LEVEL (check one)

0 ___ PRESCHOOL - K
1 ___ 1-3
2 ___ 4-6
3 ___ COMBINATION K-6
4 ___ COMB. ELEM. & JR. HIGH
5 ___ MIDDLE/JUNIOR
6 X HIGH SCHOOL
7 ___ COMB. JR. & SR. HIGH
8 ___ ALL LEVELS
9 ___ OTHER
10 ___ NOT APPLICABLE

SUBJECT OR ASSIGNMENT AREA (check one)

01 ___ SELF-CONTAINED
02 ___ LANGUAGE ARTS
03 ___ SOCIAL STUDIES
04 ___ MATHEMATICS
05 ___ SCIENCE
06 ___ HEALTH/PE
07 ___ FINE ARTS
08 ___ VOCATIONAL
09 ___ FOREIGN LANGUAGE
10 ___ BUSINESS EDUCATION
11 ___ DRIVER EDUCATION
12 ___ INDISTRIAL ARTS
13 ___ TMR
14 ___ EMR
15 ___ AH
16 ___ SH
17 ___ VH/PS
18 ___ ED
19 ___ OH/OHI
20 ___ L/LD
21 ___ MBI
22 ___ VOCATIONAL - SP. ED.
23 ___ EARLY CHILDHOOD
24 ___ ADMINISTRATION
25 ___ ANY COMB. OF 1-24
26 X OTHER: SPECIFY

POSITION (check one)

01 ___ REG. TEACHER
02 ___ PRINCIPAL
03 ___ VICE (ASST) PRIN.
04 ___ CONSULTANT
05 ___ DIAGNOSTICIAN
06 ___ AIDE
07 ___ SUPT.
08 ___ REG. COUNSELOR
09 ___ MEDIA SPEC.
10 ___ LIBRARIAN
11 ___ NURSE
12 ___ PHYSICIAN
13 ___ VISITING TEACHER
14 ___ CENTRAL ADM.
15 ___ STUDENT
16 ___ BOARD MEMBER
17 ___ SP. ED. TEACHER
18 ___ PSYCHOLOGIST
19 ___ SP. ED. COUNSELOR
20 ___ SP. ED. SUPERVISOR
21 ___ PARENT/VOLUNTEER
22 ___ OTHER: SPECIFY ________

Was your involvement in this program required? (check one)

1. X Yes   2. ___ No   3. ___ Do not know

Directions: Please circle the number which best represents your reaction to each of the items below:

	Excellent 7	6	5	4	3	2	Poor 1
1. The organization of this program was:	⑥ Clearly Evident	⑮	⑥	①	○		Vague
2. The objectives of this program were:	⑪ Excellent	⑩	④	①	○	○	Poor
3. The work of the consultant(s) used in this program was:	⑫ Very Meaningful	⑩	③	①	○	○	Meaningless
4. The ideas and activities in this program were:	⑨ Very Adequate	⑬	②	②	○	○	Inadequate
5. The scope of this program was:	⑥ Very Beneficial	⑬	④	③			No Benefit
6. Involvement in this program should prove:	⑮ Very High	⑩	①				Of No Value
7. Overall, I consider the value of this program to be:	⑯	⑨	①				

TABULATION

EDUCATION SERVICE CENTER, REGION 20

PARTICIPANT EVALUATION FORM

PROGRAM TITLE EBCE STAFF AWARENESS TRAINING SESSION

SCHOOL DISTRICT ESC, 20, Harlandale, San Antonio

CAMPUS N.A.

COUNTY Bexar

ADDRESS N.A.

Wednesday, January 5, 1977

ASSIGNMENT LEVEL (check one)

0 ___ PRESCHOOL - K
1 ___ 1-3
2 ___ 4-6
3 ___ COMBINATION K-6
4 ___ COMB. ELEM. & JR. HIGH
5 ___ MIDDLE/JUNIOR
6 _X_ HIGH SCHOOL
7 ___ COMB. JR. & SR. HIGH
8 ___ ALL LEVELS
9 ___ OTHER
10 ___ NOT APPLICABLE

SUBJECT OR ASSIGNMENT AREA (check one)

01 ___ SELF-CONTAINED
02 ___ LANGUAGE ARTS
03 ___ SOCIAL STUDIES
04 ___ MATHEMATICS
05 ___ SCIENCE
06 ___ HEALTH/PE
07 ___ FINE ARTS
08 ___ VOCATIONAL
09 ___ FOREIGN LANGUAGE
10 ___ BUSINESS EDUCATION
11 ___ DRIVER EDUCATION
12 ___ INDISTRIAL ARTS
13 ___ TMR
14 ___ EMR
15 ___ AH
16 ___ SH
17 ___ VH/PS
18 ___ ED
19 ___ OH/OHI
20 ___ L/LD
21 ___ MBI
22 ___ VOCATIONAL - SP. ED.
23 ___ EARLY CHILDHOOD
24 ___ ADMINISTRATION
25 ___ ANY COMB. OF 1-24
26 _X_ OTHER: SPECIFY

POSITION (check one)

01 ___ REG. TEACHER
02 ___ PRINCIPAL
03 ___ VICE (ASST) PRIN.
04 ___ CONSULTANT
05 ___ DIAGNOSTICIAN
06 ___ AIDE
07 ___ SUPT.
08 ___ REG. COUNSELOR
09 ___ MEDIA SPEC.
10 ___ LIBRARIAN
11 ___ NURSE
12 ___ PHYSICIAN
13 ___ VISITING TEACHER
14 ___ CENTRAL ADM.
15 ___ STUDENT
16 ___ BOARD MEMBER
17 ___ SP. ED. TEACHER
18 ___ PSYCHOLOGIST
19 ___ SP. ED. COUNSELOR
20 ___ SP. ED. SUPERVISOR
21 ___ PARENT/VOLUNTEER
22 ___ OTHER: SPECIFY ___

Was your involvement in this program required? (check one)

1. _X_ Yes 2. ___ No 3. ___ Do not know

Directions: Please circle the number which best represents your reaction to each of the items below:

	Excellent						Poor
1. The organization of this program was:	7 ⑯	6 ⑦	5 ②	4 ①	3	2	1
	Clearly Evident						Vague
2. The objectives of this program were:	7 ⑯	6 ⑦	5 ②	4 ①	3	2	1
	Excellent						Poor
3. The work of the consultant(s) used in this program was:	7 ⑲	6 ⑦	5	4	3	2	1
	Very Meaningful						Meaningless
4. The ideas and activities in this program were:	7 ⑱	6 ⑥	5 ②	4	3	2	1
	Very Adequate						Inadequate
5. The scope of this program was:	7 ⑰	6 ⑥	5 ②	4 ①	3	2	1
	Very Beneficial						No Benefit
6. Involvement in this program should prove:	7 ⑲	6 ⑤	5 ②	4	3	2	1
	Very High						Of No Value
7. Overall, I consider the value of this program to be:	7 ㉒	6 ③	5 ①	4	3	2	1

EBCE STAFF TRAINING
San Antonio, Texas

January 6-7, 1977
(to be concluded 1/18/20)

Thursday, January 6, 1977

8:30 Review planning/awareness session, preview training and plan schedule

10:00 Review EBCE program requirements, and simulate a student's progress through the program—from orientation week to completion of program requirements

1:00 Plan tasks before students start and assign responsibilities

2:30 Recordkeeping: introduce needs and analyze forms

4:00 Overnight assignment: Read EBCE handbook material on Site Recruitment and Employer Instructor Development

4:30-5:30 (Meeting at ESC-20 office with Bill Lafferty and Maury Hartle re-insurance, evaluation design, program documentation, and perceptions of training session)

Friday, January 7, 1977

8:30 Discuss upcoming visit of third party evaluator and select dates

9:00 Review site recruitment and use of Learning Site Analysis Form (LSAF)

9:30 Demonstrate site analysis interview with community representative, Dick Beal

11:00 EBCE staff interview Dick Beal re-site recruitment suggestions

1:00 ISD groups prepare their recommendations for grade, credit and reporting procedures

Trainer finalize staff task timeline for period between now and 1/18, and submit for their agreement (see attached)

2:00 Approval of task timeline and materials needed

2:30 Final review and discussion

3:00 Evaluation and adjournment

EBCE MATERIALS NEEDS

(Also see "EBCE Recordkeeping Summary" from packet of training materials; and "Summary of CE_2 Forms and Materials," M:114; Materials Bibliography, C:643)

ITEM	What To Do	By When	Who Responsible	How Many
(For Student Selection):				
Student Application				
Parent Permission form				
Information Handout				
Transportation Agreement				
Student Notification form				
(For Site Recruitment):				
Employer Information Handout				
Participation Checklist				
Insurance-related documents, such as Letter of Intent, Indemnity Covenant				
Learning Site Analysis Form				
(For Student Orientation Week):				
Blank weekly schedules				
Student Handbook				
Student tests and assessments (including student learning style self-assessment)				
(For Student Learning):				
Competencies Workbook				
Student Journal Guide				
Career Awareness student materials				
Career Exploration Guide				
Predesigned projects				
Blank project forms				
(See C:695 for sample bibliography)				
Copies of local textbooks				
Job-related learning objectives and activities (set of volumes Donna W. will write us about)				
Some basic skills programmed materials				
Spelling aids				
Dictionaries				
Learning games				
Career materials, such as DOT and OOH, etc.				
(For Student Recordkeeping):				
(See recordkeeping summary)				

EBCE TASK TIMELINE
(see also Materials Needs List)

TASK	When	Who Responsible	Authority Necessary
1. Complete student recruitment	2/1/77	Proj. Mgr.	H.S. Prin. Region 20 Rep.
2. Prepare for Parent/Employer/ Student Get-Together	1/31/77	All	
3. Recruit sites for career awareness and exploration		Proj. Mgr. Counselor	Region 20-insurance
4. Review competencies, select five to be required, recruit certifiers			
5. Define life skills project requirement			
6. Learning resources identified, ordered, prepared, printed		All	Budget-Purchasing Agent?
7. Plan and prepare for student orientation week		All	
8. Advisory Committee --identify members and define their role			
9. Prepare the facility --arrange space for various needed activities --order phones --organize filing system --stock shelves			
10. Establish recordkeeping and documentation systems			
11. Plan transportation system			
12. Arrange for student lunches, where applicable			

Notes from Thursday Evening Meeting with Bill Lafferty

Tomorrow: Add to schedule

1. Add starting and ending dates to management plan between now and return trips.

2. Develop schedule for 1st visit of 3rd party evaluator. Two staffs must agree upon date (5 days)--after student selection; prior to involvement in program.
   2/7-11.

   They must then be ready for that visit, i.e.:

   - He will make information presentation about evaluation design and procedures.
   - Interview the EBCE project staffs.
   - Review documentation on project activities

     a. staff selection
     b. staff preparation/training
     c. preparation of learning resources
     d. selection of students
     e. preparation of student learning plans
     f. implementation of learning activities
     g. avoidance of sex-role stereotyping
   - Pre-test all experimental and control students

3. What kinds, types, format for documentation of the above items under "Review documentation on project activities."

4. Written recommendation re reporting grades and credit from staffs on how they would like Lafferty/Region 20 to dialogue with LEA (ultimately TEA). He will use this recommendation to help him prepare for this dialogue.

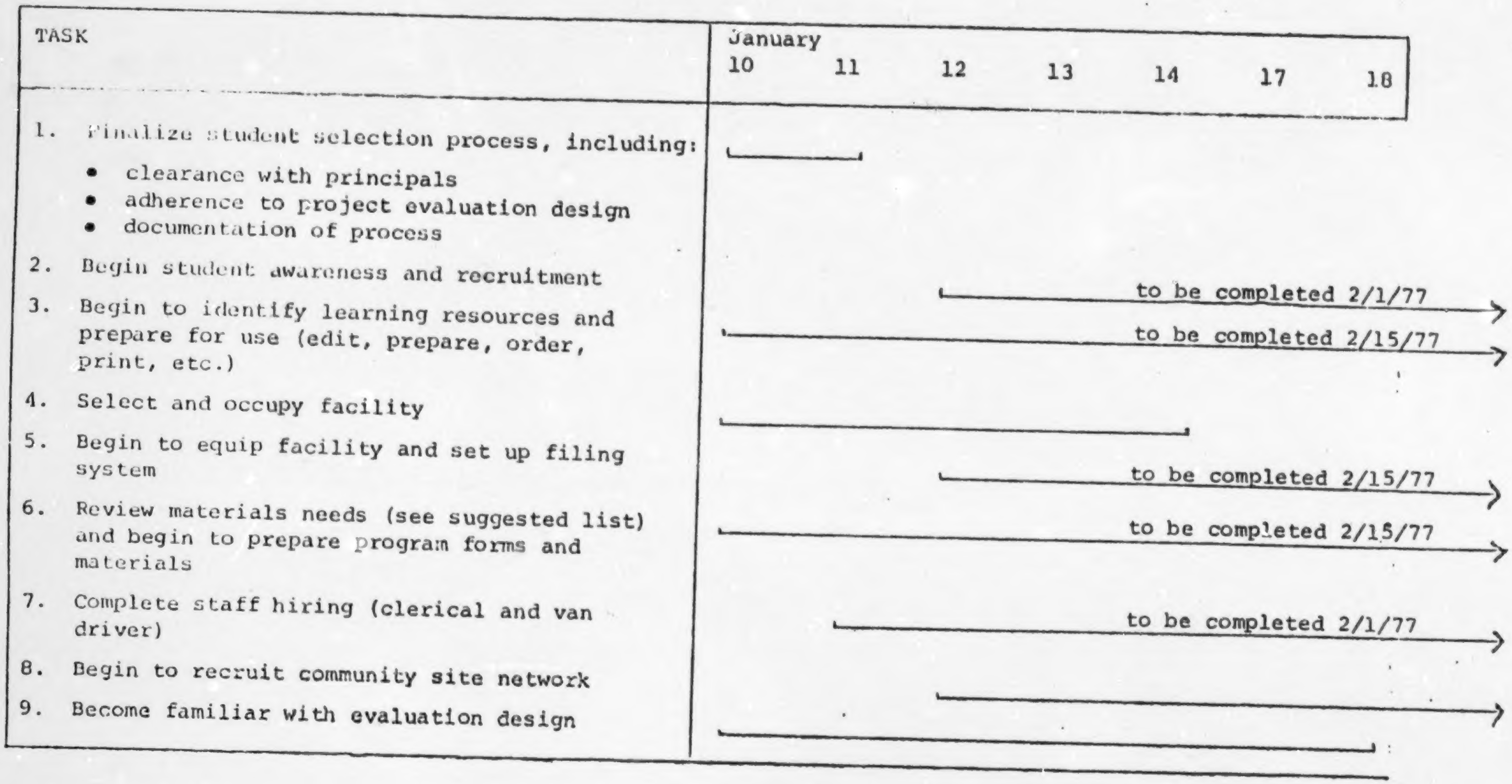
   Okay if these two staffs make different recommendations.

   ASAP -- draft tomorrow.

   Grades
   Student Selection--prior restrictions, such as option of taking classes, not eligible if in cooperative program, etc.

EBCE STAFF TRAINING

Work Timeline for 1/10-1/18/77



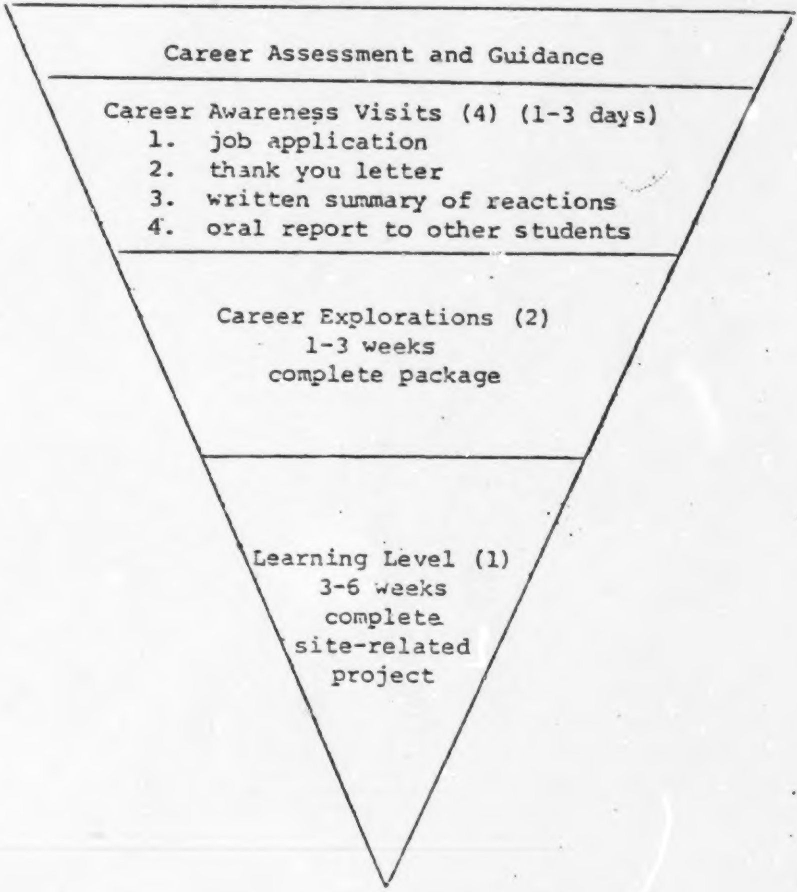
1. Finalize student selection process, including:
   - clearance with principals
   - adherence to project evaluation design
   - documentation of process
2. Begin student awareness and recruitment
3. Begin to identify learning resources and prepare for use (edit, prepare, order, print, etc.)
4. Select and occupy facility
5. Begin to equip facility and set up filing system
6. Review materials needs (see suggested list) and begin to prepare program forms and materials
7. Complete staff hiring (clerical and van driver)
8. Begin to recruit community site network
9. Become familiar with evaluation design

San Antonio Program Requirements

One quarter 1977, Seniors (total time of 9-10 weeks)

four (4)	career awareness visits
two (2)	career explorations
three (3)	life skills projects
	2--ppp (to be selected for each student) 1--site related
five (5)	functional competencies
	weekly journals
one (1)	career/employer seminar

15 hrs./wk. at community resource sites


Career Assessment and Guidance
Career Awareness Visits (4) (1-3 days)
1. job application
2. thank you letter
3. written summary of reactions
4. oral report to other students
Career Explorations (2)
1-3 weeks
complete package
Learning Level (1)
3-6 weeks
complete
site-related
project

EBCE STAFF TRAINING
ESC-20, San Antonio, Texas
Conclusion: 1/18-20/77

TUESDAY, 1/18/77

8:30 Reviewed task timelines from prior session (additions: (1) get school clearance for students to keep their textbooks; and (2) consult with curriculum specialists and department coordinators regarding learning resources).

Prepared schedule for week.

9:30 Worked through "Materials Needs Checklist":

1. Selection of students and control groups: notification process (control group equals 30 "alternates")
2. Site recruitment
   - for time being use Program Overview brochure
   - develop leaflet for resource people based on Oklahoma sample
   - develop participation checklist--stamped, self-addressed post card
   - insurance coverage not yet finalized with broker, so these forms cannot be edited or developed
3. Competencies: general discussion; return to in more detail later to determine materials needs

11:00 Harlandale staff left for student recruitment.

San Antonio staff and trainer worked on program materials and forms to be edited and produced.

(Afternoon: started working thru training packet, skipping activities previously completed)

1:30 Staff roles and responsibilities--clarified primary responsibility for major program areas. In all cases, other staff members have secondary responsibility.

Program Area	Primary Responsibility
Career guidance	Counselor
Site recruitment	Project Manager
Life skills projects	Learning Manager
Overall coordination of student's learning plan	Learning Manager
Competencies--Harlandale	Project Manager
San Antonio	?
Journal respondent	All (÷ 3)
Recordkeeping	Each for own primary area; project manager or counselor or secretary overall

(All other responsibilities as described in project proposal job descriptions)

TUESDAY (continued)

3:00 Guidance and accountability

- reviewed procedures and forms
- student journal--various purposes and ways to respond. Wrote an entry to someone in group. (At request of participants, trainer read aloud several journal entries and responded orally.)

WEDNESDAY, 1/19/77

8:30 In-depth analysis of the life skills projects.

10:00 Group described a hypothetical student, and brainstormed numerous project ideas in the various life skills areas.

Each participant selected a life skills area and wrote a project for hypothetical student.

11:00 Harlandale staff left for student recruitment.

San Antonio staff--(1) continued to work on project writing; and (2) reviewed assessment purposes, instruments and uses.

1:30 Competencies: intent, procedures, recruiting and scheduling

2:30 Planned student orientation week, districts working in small groups (see suggestions on Attachment I).

3:45 Reconvened large group and compared plans (see Harlandale's plan, Attachment II).

4:00 Returned to discussion of staff roles and schedules.

- overnight assignment: read handbook section on El Development (E:63-102; 195-242)
- overnight-trainer: read and commented on individually written projects

THURSDAY, 1/20/77

8:30 Trainer returned projects and discussed reactions (see Attachment III).

Referred to Basic Considerations for Project Design and discussed items.

9:45 Reviewed the individualization cycle of assessment, negotiation, evaluation.

10:15 Viewed video-tape of CE$_2$ (Tigard, Oregon)--Learning Manager and student evaluating a project.

Discussed reactions.

THURSDAY (continued)

11:00 Harlandale staff left for student recruitment.

San Antonio staff project coordinator and trainer went to site of learning center to plan space utilization.

1:30 Reviewed the necessary recordkeeping forms and assembled for preparation.

2:30 Updated task timelines.

3:00 Evaluations.

Student Orientation References

Handbook narrative on student orientation (S:27-34)

Samples of orientation week schedules:

- CE_2 1973-74 (S:243-252)
- CE_2 1974-75 (S:253-263)
- CE_2 1975-76 (handout in training session)

Sample CE_2 Student Handbook (S:197-241)

Suggested materials to give students (preferably all assembled to avoid confusion):

Student Handbook (includes)
  Program description
  Program requirements
  Blank schedules
  Typical day
  Transportation options
  Behavioral expectations

Sample forms (including)
  Sign in/out sheet
  Employer instructor/student contract
  Weekly time slips
  Transportation request
  Reimbursement forms
  Skill development record
  Accountability slip

Program Materials (including)
  Learning Style Self-Assessment
  Journal book
  Career awareness sheet
  Exploration guide
  First required project
  Project writing guide (C:229-232)

Suggested activities for student orientation

1. Learn names and primary responsibilities of program staff.
2. Learn resources available at Learning Center, how to obtain them (scale drawing?) and start identifying others needed (purchase order, budget?)
3. Understand relationship of program to community and school (flow chart? career assessments? site choices?)
4. Explain the program requirements for first three weeks in terms of:
   - who on staff to plan/negotiate with (maybe staff and "ham" student can role play a student's progress through program)

- what order, if any, is required for each requirement
- how are requirements adapted to their individual needs (maybe do LSSA and role play negotiation)

5. Start practicing time management skills:

   - make weekly schedule
   - keep appointments
   - plan out overall schedule for quarter

6. Group awareness visits to some big places that have lots of careers represented.
7. Have journal workshop and start writing first entry.
8. Introduce accountability/recordkeeping requirements:

   - Sign in/out sheets
   - Student and EI Contract
   - Weekly time slips
   - Transportation request
   - Reimbursement forms
   - Blank schedules
   - Accountability slips

9. Some get-acquainted games and begin to prepare a collage that represents the group.

ESC-20
Attachment II
Harlandale Plan

Harlandale's Overall Plan for Student's Meeting Requirements

Orientation Week					REMAINING NINE WEEKS		
					1 2 3	4 5 6	7 8 9
M	T	W	TH	F			
Morning: Program Orientation Activities				Introduce students to first EIs	1 exploration 1 project: ppp--CT or P/SD 1 competency 3 journal entries	2 explorations 1 project: ppp or individual 2 competencies 3 journal entries	1 career-oriented project (on learning level 2 competencies 3 journal entries
Afternoon							
Career awareness visits	Career awareness visits	Career awareness visits	Career awareness visits				

General Summary of Project Format

Title: Descriptive of project

Rationale: Why project is good for this student in terms of:

- Life Skills--area selected
- Basic Skills--level of ability, needs
- Career Development--life/career goals

Activities: One per page

In terms of action to be performed

Objective for each activity: What student will get out of doing this activity

Resources: Variety

Products: One for each activity

What student will produce for purposes of evaluation; who will evaluate

Criteria: To be negotiated. Write very specifically at time of negotiation

Do products give basis for evaluating activity?

Does activity fulfill objective?

Do objectives meet rationale?

Is total project a good, substantial learning experience?

Does it meet the needs of this student?

TABULATION

EDUCATION SERVICE CENTER, REGION 20

PARTICIPANT EVALUATION FORM

PROGRAM TITLE EBCE STAFF TRAINING (INTENSIVE)

SCHOOL DISTRICT ESC, 20, Harlandale, San Antonio

CAMPUS N.A.

COUNTY Bexar

ADDRESS N.A.

Tuesday, January 18, 1977

ASSIGNMENT LEVEL (check one)

0 ___ PRESCHOOL - K
1 ___ 1-3
2 ___ 4-6
3 ___ COMBINATION K-6
4 ___ COMB. ELEM. & JR. HIGH
5 ___ MIDDLE/JUNIOR
6 ___ HIGH SCHOOL
7 ___ COMB. JR. & SR. HIGH
8 ___ ALL LEVELS
9 ___ OTHER
10 X NOT APPLICABLE

SUBJECT OR ASSIGNMENT AREA (check one)

01 ___ SELF-CONTAINED
02 ___ LANGUAGE ARTS
03 ___ SOCIAL STUDIES
04 ___ MATHEMATICS
05 ___ SCIENCE
06 ___ HEALTH/PE
07 ___ FINE ARTS
08 ___ VOCATIONAL
09 ___ FOREIGN LANGUAGE
10 ___ BUSINESS EDUCATION
11 ___ DRIVER EDUCATION
12 ___ INDISTRIAL ARTS
13 ___ TMR
14 ___ EMR
15 ___ AH
16 ___ SH
17 ___ VH/PS
18 ___ ED
19 ___ OH/OHI
20 ___ L/LD
21 ___ MBI
22 ___ VOCATIONAL - SP. ED.
23 ___ EARLY CHILDHOOD
24 ___ ADMINISTRATION
25 ___ ANY COMB. OF 1-24
26 X OTHER: SPECIFY

POSITION (check one)

01 ___ REG. TEACHER
02 ___ PRINCIPAL
03 ___ VICE (ASST) PRIN.
04 ___ CONSULTANT
05 ___ DIAGNOSTICIAN
06 ___ AIDE
07 ___ SUPT.
08 ___ REG. COUNSELOR
09 ___ MEDIA SPEC.
10 ___ LIBRARIAN
11 ___ NURSE
12 ___ PHYSICIAN
13 ___ VISITING TEACHER
14 ___ CENTRAL ADM.
15 ___ STUDENT
16 ___ BOARD MEMBER
17 ___ SP. ED. TEACHER
18 ___ PSYCHOLOGIST
19 ___ SP. ED. COUNSELOR
20 ___ SP. ED. SUPERVISOR
21 ___ PARENT/VOLUNTEER
22 X OTHER: SPECIFY ___

Was your involvement in this program required? (check one)

1. X Yes 2. ___ No 3. ___ Do not know

Directions: Please circle the number which best represents your reaction to each of the items below:

	Excellent						Poor
1. The organization of this program was:	7 ④	6 ②	5	4	3	2	1
	Clearly Evident						Vague
2. The objectives of this program were:	7 ④	6 ②	5	4	3	2	1
	Excellent						Poor
3. The work of the consultant(s) used in this program was:	7 ⑤	6 ①	5	4	3	2	1
	Very Meaningful						Meaningless
4. The ideas and activities in this program were:	7 ⑤	6 ①	5	4	3	2	1
	Very Adequate						Inadequate
5. The scope of this program was:	7 ⑤	6 ①	5	4	3	2	1
	Very Beneficial						No Benefit
6. Involvement in this program should prove:	7 ④	6 ②	5	4	3	2	1
	Very High						Of No Value
7. Overall, I consider the value of this program to be:	7 ④	6 ②	5	4	3	2	1

TABULATION

EDUCATION SERVICE CENTER, REGION 20

PARTICIPANT EVALUATION FORM

PROGRAM TITLE EBCE STAFF TRAINING (INTENSIVE)

SCHOOL DISTRICT ESC, 20, Harlandale, San Antonio

CAMPUS N.A.

COUNTY Bexar

ADDRESS N.A.

Wednesday, January 19, 1977

ASSIGNMENT LEVEL (check one)

0 ___ PRESCHOOL - K
1 ___ 1-3
2 ___ 4-6
3 ___ COMBINATION K-6
4 ___ COMB. ELEM. & JR. HIGH
5 ___ MIDDLE/JUNIOR
6 ___ HIGH SCHOOL
7 ___ COMB. JR. & SR. HIGH
8 ___ ALL LEVELS
9 ___ OTHER
10 X NOT APPLICABLE

SUBJECT OR ASSIGNMENT AREA (check one)

01 ___ SELF-CONTAINED
02 ___ LANGUAGE ARTS
03 ___ SOCIAL STUDIES
04 ___ MATHEMATICS
05 ___ SCIENCE
06 ___ HEALTH/PE
07 ___ FINE ARTS
08 ___ VOCATIONAL
09 ___ FOREIGN LANGUAGE
10 ___ BUSINESS EDUCATION
11 ___ DRIVER EDUCATION
12 ___ INDISTRIAL ARTS
13 ___ TMR
14 ___ EMR
15 ___ AH
16 ___ SH
17 ___ VH/PS
18 ___ ED
19 ___ OH/OHI
20 ___ L/LD
21 ___ MBI
22 ___ VOCATIONAL - SP. ED.
23 ___ EARLY CHILDHOOD
24 ___ ADMINISTRATION
25 ___ ANY COMB. OF 1-24
26 X OTHER: SPECIFY

POSITION (check one)

01 ___ REG. TEACHER
02 ___ PRINCIPAL
03 ___ VICE (ASST) PRIN.
04 ___ CONSULTANT
05 ___ DIAGNOSTICIAN
06 ___ AIDE
07 ___ SUPT.
08 ___ REG. COUNSELOR
09 ___ MEDIA SPEC.
10 ___ LIBRARIAN
11 ___ NURSE
12 ___ PHYSICIAN
13 ___ VISITING TEACHER
14 ___ CENTRAL ADM.
15 ___ STUDENT
16 ___ BOARD MEMBER
17 ___ SP. ED. TEACHER
18 ___ PSYCHOLOGIST
19 ___ SP. ED. COUNSELOR
20 ___ SP. ED. SUPERVISOR
21 ___ PARENT/VOLUNTEER
22 X OTHER: SPECIFY ___

Was your involvement in this program required? (check one)

1. X Yes 2. ___ No 3. ___ Do not know

Directions: Please circle the number which best represents your reaction to each of the items below:

	Excellent						Poor
1. The organization of this program was:	7 ⑤	6 ①	5	4	3	2	1
	Clearly Evident						Vague
2. The objectives of this program were:	7 ⑤	6	5 ①	4	3	2	1
	Excellent						Poor
3. The work of the consultant(s) used in this program was:	7 ⑤	6 ①	5	4	3	2	1
	Very Meaningful						Meaningless
4. The ideas and activities in this program were:	7 ⑤	6 ①	5	4	3	2	1
	Very Adequate						Inadequate
5. The scope of this program was:	7 ⑤	6 ①	5	4	3	2	1
	Very Beneficial						No Benefit
6. Involvement in this program should prove:	7 ⑤	6 ①	5	4	3	2	1
	Very High						Of No Value
7. Overall, I consider the value of this program to be:	7 ⑤	6 ①	5	4	3	2	1

TABULATION

EDUCATION SERVICE CENTER, REGION 20

PARTICIPANT EVALUATION FORM

PROGRAM TITLE EBCE STAFF TRAINING (INTENSIVE)

SCHOOL DISTRICT ESC, 20, Harlandale, San Antonio

CAMPUS N.A.

COUNTY Bexar

ADDRESS N.A.

Thursday, January 20, 1977

ASSIGNMENT LEVEL (check one)

0 ___ PRESCHOOL - K
1 ___ 1-3
2 ___ 4-6
3 ___ COMBINATION K-6
4 ___ COMB. ELEM. & JR. HIGH
5 ___ MIDDLE/JUNIOR
6 ___ HIGH SCHOOL
7 ___ COMB. JR. & SR. HIGH
8 ___ ALL LEVELS
9 ___ OTHER
10 X NOT APPLICABLE

SUBJECT OR ASSIGNMENT AREA (check one)

01 ___ SELF-CONTAINED
02 ___ LANGUAGE ARTS
03 ___ SOCIAL STUDIES
04 ___ MATHEMATICS
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08 ___ VOCATIONAL
09 ___ FOREIGN LANGUAGE
10 ___ BUSINESS EDUCATION
11 ___ DRIVER EDUCATION
12 ___ INDISTRIAL ARTS
13 ___ TMR
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15 ___ AH
16 ___ SH
17 ___ VH/PS
18 ___ ED
19 ___ OH/OHI
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22 ___ VOCATIONAL - SP. ED.
23 ___ EARLY CHILDHOOD
24 ___ ADMINISTRATION
25 ___ ANY COMB. OF 1-24
26 X OTHER: SPECIFY

POSITION (check one)

01 ___ REG. TEACHER
02 ___ PRINCIPAL
03 ___ VICE (ASST) PRIN.
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07 ___ SUPT.
08 ___ REG. COUNSELOR
07 ___ MEDIA SPEC.
10 ___ LIBRARIAN
11 ___ NURSE
12 ___ PHYSICIAN
13 ___ VISITING TEACHER
14 ___ CENTRAL ADM.
15 ___ STUDENT
16 ___ BOARD MEMBER
17 ___ SP. ED. TEACHER
18 ___ PSYCHOLOGIST
19 ___ SP. ED. COUNSELOR
20 ___ SP. ED. SUPERVISOR
21 ___ PARENT/VOLUNTEER
22 X OTHER: SPECIFY ___

Was your involvement in this program required? (check one)

1. X Yes 2. ___ No 3. ___ Do not know

Directions: Please circle the number which best represents your reaction to each of the items below:

	Excellent						Poor
1. The organization of this program was:	7 ⑤	6 ①	5	4	3	2	1
	Clearly Evident						Vague
2. The objectives of this program were:	7 ⑤	6 ①	5	4	3	2	1
	Excellent						Poor
3. The work of the consultant(s) used in this program was:	7 ⑤	6 ①	5	4	3	2	1
	Very Meaningful						Meaningless
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	Very Adequate						Inadequate
5. The scope of this program was:	7 ⑥	6	5	4	3	2	1
	Very Beneficial						No Benefit
6. Involvement in this program should prove:	7 ⑤	6 ①	5	4	3	2	1
	Very High						Of No Value
7. Overall, I consider the value of this program to be:	7 ⑤	6 ①	5		3	2	1

EDUCATION SERVICE CENTER, REGION 20

EBCE PROGRAM

Student Activities Schedule

Spring Quarter 1977

Time of Performance	Student Activities	Responsibility for Assisting Students
During First Week	Introduction to EBCE (Briefing on Fair–Sex, Non stereotype job opportunities, and student/community resource instructor relationship)	Staff
During First Week	Select 5 functional competencies to be accomplished	Staff
Five Total: 1–by March 31 2–by April 30 3–by May 31	Complete functional competencies selected	Staff
During Second Week	Select community sites for initial career development	Staff
During Second Week	Submit required life skills project plans	Staff
1 per month	Complete Life Skills Projects	Staff
Five Total: 2–by March 31 3–by April 30	Visit community sites for career awareness	Staff/Community
Throughout	Maintain Student Progress Journal	Staff
Two Total: 1–by April 15 1–by May 30	Complete career development explorations at community sites	Community Resource Instructor
At completion each career exploration project	Obtain Community Resource Student Evaluation	Staff/Community Resource Instructor
Two Total: 1–by April 15 1–by May 30	Submit Career Development Report	Staff

STUDENTS SCHOOL YEAR ACTION CHART

Below is a chart of Actions with the required tasks, assistance and possible outcomes.

To be an active, participating member of EBCE is to realize your potential and worth as a person while giving and receiving group support. As you begin to build trust, openness and caring, you will gain a better understanding of yourself and others. Being able to feel good about yourself and others will help you to achieve a life of happiness, self-responsibility and personal fulfillment.

Inability to be a "GIVER" and a "DOER" may lead to "Not OK" feelings and poor communication with others -- and interfere with your growth as a healthy and wholesome person.

ACTIONS	STUDENT REQUIREMENTS	ASSISTANCE	POSSIBLE RESULTS
Orientation	Participate in activities	Student Coordinator/ Guidance Counselor	Understand program Begin initial activities Make new acquaintances and friends OR Confusion Fall behind on requirements
Weekly Meetings	Promptness Regular weekly attendance Involvement Interaction	Student Coordinator/ Guidance Counselor	Personal growth Awareness of self and others Increased communication skills OR Loss of confidence in group participation and activities Loss of forming new and deeper relationships with staff and pears
Employer Seminars	Promptness Regular monthly attendance Involvement Interaction	Student Coordinator/ Guidance Counselor	Career information and preparation Opportunity to meet and share ideas with Employers and other community people OR Loss of helpful information and suggestions Make-up work Loss of credit

STUDENTS SCHOOL YEAR ACTION CHART — CONTINUED

You have many personal choices in developing your own learning plan in the EBCE program. While exploring the problems of the real world by handling job responsibilities, working directly with others and making decisions, you will be putting into action your learning plan, thereby developing and using your skills in reading, writing, listening, speaking and computing.

Failure to develop a learning plan and strategies places the burden of responsibility on staff members to assign you activities and assignments which you may find less interesting, boring and unnecessary.

ACTIONS	STUDENT REQUIREMENTS	ASSISTANCE	POSSIBLE RESULTS
Initiate first meeting with LM Begin first project in Critical Thinking Begin first project in Personal-Social Development Complete and turn in first project in Critical Thinking Evaluate project with LM Begin weekly journals Plan next zone activities	Meet regularly with LM Initiate and establish learning program activities and target dates Work on Critical Thinking Project and Personal Social Development Project Establish appropriate study times Turn in journals promptly and regularly Regular and consistent attendance and performance on learning program	Learning Manager	High level of success in program Credit for completed work Assistance in planning learning program Assistance on projects OR Low level of success in program Make-up work Loss of credit Student Accountability System/Penalties

STUDENTS SCHOOL YEAR ACTION CHART — CONTINUED

Using the employer network to its fullest by actively choosing explorations and learning levels will help you to increase your knowledge of your own interests and abilities. You will be able to use this information to understand career interests and to make decisions. You will also have the opportunity of developing career skills while actively using materials and resources located on employer sites of your choice.

It is your responsibility to use the employer network and resources with a high degree of involvement. Your failure to do so creates situations in which you limit the possibility of future career options, job opportunities and advancement. You will also run the risk of losing valuable "know-how" needed to pursue a career interest and the steps necessary to prepare yourself to meet basic job requirements.

ACTIONS	STUDENT REQUIREMENTS	ASSISTANCE	POSSIBLE RESULTS
Initiate meetings with Project Manager (P.M.) Make exploration choices Go on explorations/ Learning Levels Meet with P.M. to evaluate first exploration Turn in weekly time slips Complete and turn in first exploration package	Meet regularly with L.M. Select and participate on explorations and Learning Level Complete and turn in exploration packages Submit weekly time slips Regular and consistent attendance and performance on job site Promptly meet appointment times with employers	Project Manager	High level of success in career development Credit for completed work Assistance and information regarding future employment possibilities from employers in career areas OR Low level of success Loss of credit Loss of time credit Loss of job site Make-up work Student Accountability System/Penalties

STUDENTS SCHOOL YEAR ACTION CHART –– CONTINUED

As you move outside the four walls of the classroom and make the community your school, you will find many resources and people who offer a variety of opportunities for learning. You will also develop and put to use "competencies" or "survival skills" which will enable you to get along in society, become a responsible citizen and assist you in making decisions in your personal life.

By not exploring the vast material and human resources in the community, you lose the opportunity of discovering new ideas, values and information. You will be forced to depend on others rather than yourself. In addition, it will be more difficult for you to become an independent adult.

ACTIONS	STUDENT REQUIREMENTS	ASSISTANCE	POSSIBLE RESULTS
Initiate first meeting with L.M. Orientation in locating EBCE and community resources and materials Orientation to competencies Begin first competency Establish competency target dates	Proper checking out and handling of materials and equipment Proper use of resources Meet regularly with L.M. to set up competencies Prompt attendance at competency seminars Promptly meet appointment times with competency certifiers and turors	Learning Manager and Student Coordinator	Successful use of EBCE and community resources and materials High level of success in setting up and completing competency requirement Assistance in finding materials and resources for projects OR Denied use of materials and resources Loss of competency credit Student Accountability System/Penalties

EDUCATION SERVICE CENTER, REGION 20, EBCE PROGRAM

MANAGEMENT TASKS

TASK	DATE	MANAGEMENT RESPONSIBILITY
Program Planning	Present through August, 1979	ESC Region 20
Management Coordination of the Program	From notification of proposal acceptance to August 31, 1979	ESC Region 20
Selection of Staff	Upon notification of funding and thereafter as required	ISDs
Recruitment and Selection of Students	Fall 1976 for first year program, Spring 1977 for second year program, Spring 1978 for third year program	ISDs
Inservice Training of Staff	Initially week of August 30, 1976, periodically thereafter	ESC Region 20 and ISD's
Training of Community Site Instructors	Upon notification of proposal acceptance and as required thereafter	ISD's coordinated by ESC Region 20
Recruitment and Selection of Learning Sites	Upon notification of proposal acceptance and quarterly thereafter	ISD's coordinated by ESC Region 20
Program Implementation	September, 1976 through August, 1979	ISD's coordinated by ESC Region 20
Program Evaluation	Pre-testing commences Fall 1976. Various phases of testing and data collection through August, 197[illegible]	ESC Region 20
Program Results Dissemination	After evaluation each ESC, Region 20 school year. Report highlights of program whenever occurring.	ESC Region 20
Program Review-Consideration for EBCE extension via local funding	June, 1977 - Quarterly thereafter	ESC Region 20

EDUCATION SERVICE CENTER, REGION 20

Time Schedule for Accomplishment of Region 20

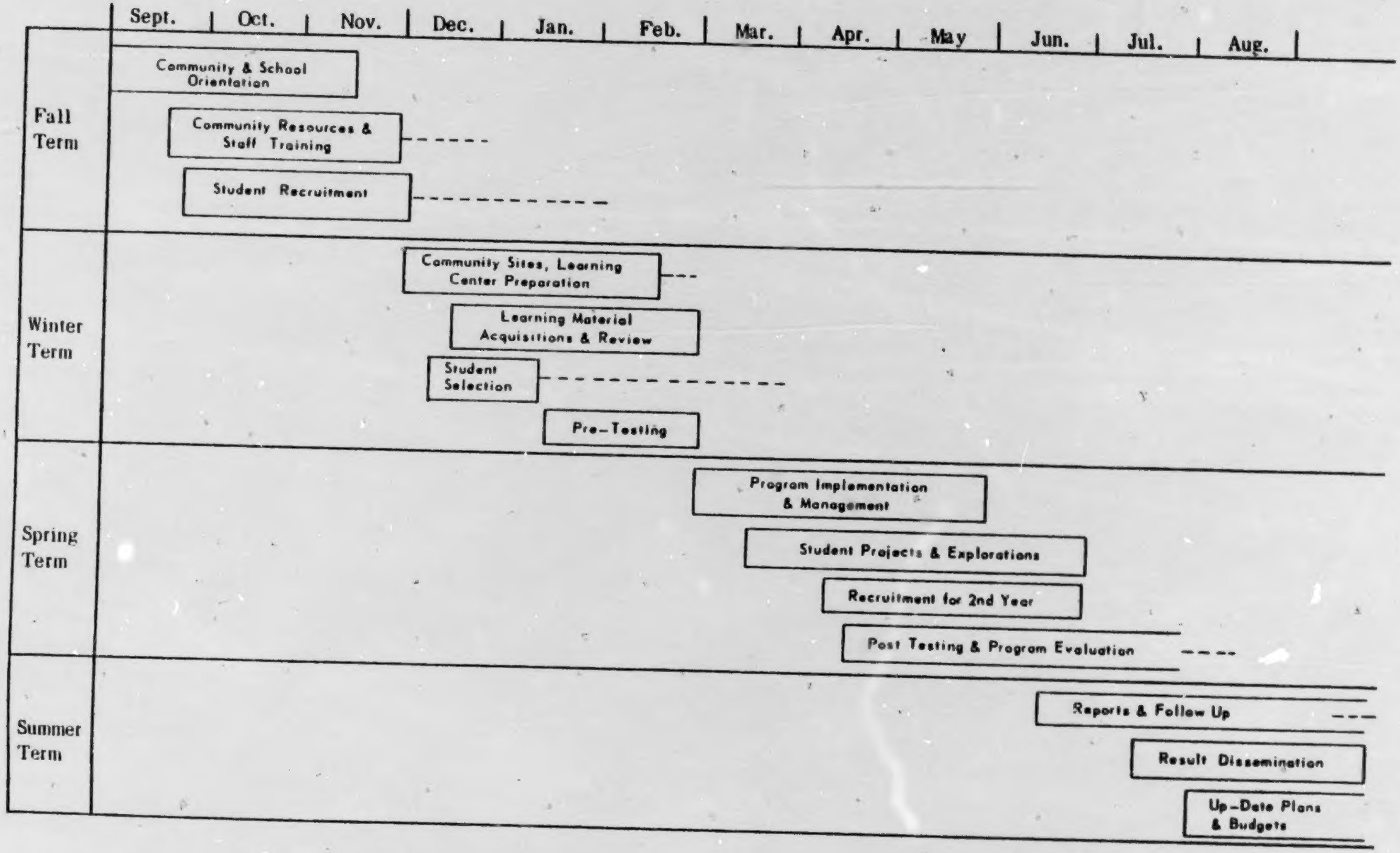
Proposed EBCE Program Tasks — First Year

During Month/Year	Projected Activities
9/76	1. 2. 3. 4. 4a. 5. 6. 7.
10/76	3. 4. 5. 6. 7.
11/76	4a. 7. 10. 11.
12/76	7. 12. 13.
1/77	7. 8. 9. 16.
2/77	14. 15. 17. 18.
3/77	19. 24.
4/77	20. 21. 25.
5/77	22. 23. 26.
6/77	27. 20. 29. 30.
7/77	31.
8/77	2. 3. 5. 32.

Activities

1. Establish Advisory Committee
2. Employ EBCE Staff
3. Receive Advisory Committee recommendations
4. Conduct staff inservice training
4a. Conduct learning site instructors' training
5. Begin briefing key groups (parents, community leaders, and students)
6. Conduct initial resources survey and receive employer commitments.
7. Recruit first year EBCE Students from 12th grade
8. Select students for EBCE and establish pool student volunteers
9. Pre-test selected and stand-by students
10. Designate regional and district support system needs
11. Establish learning centers
12. Prepare first year curriculum design (NWREL)
13. Prepare first year evaluation procedures (RBS)
14. Prepare revised budget plan
15. Continue sign-up of specific community learning sites
16. Continue staff training sessions
17. Work with selected students in area of guidance and student services (emphasize non-traditional possibilities)
18. Begin EBCE with selected students
19. Operate program IAW design and objectives
20. Maintain student records
21. Collect evaluation data
22. Have students plan, select and execute community site exploration and learning skill projects
23. Hold employer seminars
24. Prepare EBCE information material for external distribution
25. Commence recruiting students for second year program
26. Conduct student placement (emphasis on six-fair)
27. Submit second EBCE Implementation Proposal
28. Continue community liaison
29. Continue staff inservice training
30. Program review with superintendents
31. Disseminate Region 20 EBCE Program results information (statewide)
32. Obtain follow-up information on EBCE graduates

EDUCATION SERVICE CENTER, REGION 20
EBCE Program – First Year
Time Schedule Outline
1976 – 1977



EDUCATION SERVICE CENTER, REGION 20, EBCE PROGRAM

EXTERNAL REVIEW COMMITTEES

To monitor materials, learning site selection procedures, career exploration and job placement for the purpose of helping to eliminate sex bias in the EBCE program.

South San Independent School District

Ms. Ethel Sewell 239 Hollenbeck San Antonio, Texas 78211	Parent-community worker-teacher in the migrant program
Mr. Pedro Hernandez 902 W. Martin San Antonio, Texas 78207	Parent-community worker-teacher-supervisor in the Bexar County Community Education Program
Mr. Frank Norvell 1306 Picardie Drive San Antonio, Texas 78219	Parent-community worker-active in the precinct government
Mr. Francis Stegman 542 Pleasanton San Antonio, Texas 78214	Owner and operator of a business firm, Stegman Furniture
Ms. Karen Crum 7026 Wurzbach San Antonio, Texas 78240	Secretary and Loan Clerk, Community Enterprise
Ms. Louisa Quinones 409 Quitman San Antonio, Texas 78208	Vocation Education Office, Teacher Coordinator

Harlandale Independent School District

Ms. Velma Kuehne 110 E. Dixon San Antonio, Texas 78216	School Cafeteria
Ms. Geraldine Mullins 430 Cherryridge San Antonio, Texas 78213	School Counselor
Ms. Bess Hart 859 Gillette Avenue San Antonio, Texas 78224	Parent Teacher Association
Ms. Edna Dirmeier 1830 Escalon San Antonio, Texas 78221	Community Enterprise Employee
Mr. George Killen 321 East Huff San Antonio, Texas 78214	School Board Member

Student membership on committees will follow student body orientation of EBCE program

EDUCATION SERVICE CENTER, REGION 20, EBCE PROGRAM

Experience–Based Career Education Initial Advisory Committee

NAME	ADDRESS/PHONE NUMBER	REPRESENTING
Mr. Esteban Sosa, Chairman	1243 W. Gerald San Antonio, Texas 78211 922-2836	Alamo Area Council of Governments
Mr. Frank Herrera, Attorney	115 Villita San Antonio, Texas 78205 224-2301	Labor Unions
Mr. Herbert Harper, Superintendent	2515 Sioux San Antonio, Texas 78224 924-8541	Secondary Education
Mr. Charles N. Boggess, Superintendent	102 Genevieve San Antonio, Texas 78285 924-2301	Secondary Education
Mr. Ronald P. Smith, Manager	15126 Encino Verde San Antonio, Texas 78232 228-5087	Retail Business
Dr. John E. Kee	1915 Pleasanton Road San Antonio, Texas 78221 922-1254	Medical Profession
Ms. Pat De Werff	3355 Cherryridge, Suite 103 San Antonio, Texas 78230 344-9738	National Alliance of Businessmen
Maj. Gen William Starness, USA (Ret.), Vice President	USAA Building San Antonio, Texas 78288 690-4054	Insurance Business
Ms. James W. Roy, Council President	6002 Seacomber San Antonio, Texas 78242	Parent Teacher Association
Mr. Hannibal V. Guerra, Vice President	10202 Desert Sands San Antonio, Texas 78216 344-0853	Banking
Mr. Sueltenfuss Vice President	3570 S.W. Military Drive San Antonio, Texas 78211	Finance Business
Mr. Gene Bryant, General Manager	1554 Cantrel San Antonio, Texas 78221 924-8531	Industry
Ms. Linda Nelson, Owner-Operator	2722 W. Southcross San Antonio, Texas 78211 923-4359	Sales and Service
Ms. Pat Anderson, Personnel Manager	701 S. Zarzamora San Antonio, Texas 78207 434-5252	Hospital Services
Mr. Robert Dalglish, Past Pres. Texas Assoc. Community Services & Continuing Education	1601 N. Main Avenue San Antonio, Texas 78212 227-7156	Higher Education
Ms. Louisa Quinones, V.O.E. Teacher Coordinator	1227 Willow, Apt. #1 San Antonio, Texas 78202 225-8104	Vocational Education